

JANUARY 2010



# TRACKER

MEASURES OF DEPARTMENTAL PERFORMANCE



Missouri Department  
of Transportation

# GREETINGS FROM MoDOT

The Missouri Department of Transportation is committed to being open and transparent. We want you to know what we do well, what we don't do so well and what we are doing to get better. That is why we created the Tracker.

This document is your window into MoDOT – warts and all. It invites you to hold us accountable for exceeding your expectations. You expect MoDOT to get the best value out of every dollar spent. You expect us to make highways smoother and safer, soon. You expect us to fix bad bridges, be responsive and to proactively give you the information you need. You expect us to provide a world-class transportation experience.



PETE K. RAHN, DIRECTOR  
MISSOURI DEPARTMENT OF  
TRANSPORTATION

We share your expectations and have built 18 tangible results around them. These results guide us everyday as we go about the business of delighting our customers. In the Tracker, you will see that we have established measures to gauge our progress and we are comparing ourselves to the best organizations in the country.

You can use the Tracker to see how we are measuring up. We make it available in a printed format and on our website at [www.modot.org](http://www.modot.org). Missouri's transportation system will not improve unless we all work together. The Tracker is one of the many ways you can help. Please look it over and let us know how we are doing.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Pete', written in a cursive style.

## ***Mission***

*Our mission is to provide a world-class transportation experience that delights our customers and promotes a prosperous Missouri.*



# TANGIBLE RESULTS

- Uninterrupted Traffic Flow
- Smooth and Unrestricted Roads and Bridges
- Safe Transportation System
- Roadway Visibility
- Personal, Fast, Courteous and Understandable Response to Customer Requests (Inbound)
- Partner With Others to Deliver Transportation Services
- Leverage Transportation to Advance Economic Development
- Innovative Transportation Solutions
- Fast Projects That Are of Great Value
- Environmentally Responsible
- Efficient Movement of Goods
- Easily Accessible Modal Choices
- Customer Involvement in Transportation Decision-Making
- Convenient, Clean and Safe Roadside Accommodations
- Best Value for Every Dollar Spent
- Attractive Roadsides
- Advocate for Transportation Issues
- Accurate, Timely, Understandable and Proactive Transportation Information (Outbound)

# VALUE STATEMENTS

MoDOT will -

- support and develop employees because we believe they are the key to our success.
- be flexible because we believe one size does not fit all.
- honor our commitments because we believe in integrity.
- encourage risk and accept failure because we believe in getting better.
- be responsive and courteous because we believe in delighting our customers.
- empower employees because we trust them to make timely and innovative decisions.
- not compromise safety because we believe in the well-being of employees and customers.
- provide the best value for every dollar spent because we're taxpayers too.
- value diversity because we believe in the power of our differences.
- be one team because we all share the same mission.
- use teamwork because it produces the best results.
- foster an enjoyable workplace because we care about each other and our mission.
- be open and honest because we must be trustworthy.
- listen and seek to understand because we value everyone's opinion.
- treat everyone with respect because we value their dignity.
- seek out and welcome any idea that increases our options because we don't have all the answers.
- always strive to do our job better, faster, and cheaper because we want to meet more of Missouri's needs.

# TRACKER TABLE OF CONTENTS

<b>Uninterrupted Traffic Flow – Don Hillis (Page 1)</b>		
Average travel indices and speeds on selected freeway sections	Troy Pinkerton	1a
Average rate of travel on selected signalized routes	Julie Stotlemeyer	1b
Average time to clear traffic incident	Rick Bennett	1c
Average time to clear traffic backup from incident	Rick Bennett	1d
Number of customers assisted by the Motorist Assist program	Rick Bennett	1e
Percent of Motorist Assist customers who are satisfied with the service	Rick Bennett	1f
Percent of work zones meeting expectations for traffic flow	Dan Smith	1g
Time to meet winter storm event performance objectives on major and minor highways	Tim Jackson	1h
<b>Smooth and Unrestricted Roads and Bridges – Kevin Keith (Page 2)</b>		
Projects that contribute to the Better Roads, Brighter Future program goal	Jay Bledsoe	2a
Percent of major highways that are in good condition	Jay Bledsoe	2b
Percent of minor highways that are in good condition	Jay Bledsoe	2c
Percent of vehicle miles traveled on major highways in good condition	Jay Bledsoe	2d
Percent of deficient bridges on major highways	Dennis Heckman	2e
Percent of deficient bridges on minor highways	Dennis Heckman	2f
Number of deficient bridges on the state system (major & minor highways)	Dennis Heckman	2g
<b>Safe Transportation System – Don Hillis (Page 3)</b>		
Number of fatalities and disabling injuries	Leanna Depue	3a
Number of impaired driver-related fatalities and disabling injuries	Leanna Depue	3b
Rate of annual fatalities and disabling injuries	Leanna Depue	3c
Percent of safety belt/passenger vehicle restraint use	Leanna Depue	3d
Number of bicycle and pedestrian fatalities and disabling injuries	Leanna Depue	3e
Number of motorcycle fatalities and disabling injuries	Leanna Depue	3f
Number of commercial motor vehicle crashes resulting in fatalities	Mark Biesemeyer	3g
Number of commercial motor vehicle crashes resulting in injuries	Mark Biesemeyer	3h
Number of fatalities and injuries in work zones	Troy Pinkerton	3i
Number of highway-rail crossing fatalities and collisions	Rod Massman	3j
<b>Roadway Visibility – Don Hillis (Page 4)</b>		
Rate of nighttime crashes	Mike Curtit	4a
Percent of signs that meet customers' expectations	Mike Curtit	4b
Percent of stripes that meet customers' expectations	Jim Brocksmith	4c
Percent of work zones meeting expectations for visibility	Dan Smith	4d
<b>Personal, Fast, Courteous and Understandable Response to Customer Requests (Inbound) – Shane Peck (Page 5)</b>		
Percent of overall customer satisfaction	Sally Oxenhandler	5a
Percent of customers who contacted MoDOT that felt they were responded to quickly and courteously with an understandable response	Sally Oxenhandler	5b
Percent of documented customer requests responded to within 24 hours	Sally Oxenhandler	5c
Average completion time on requests requiring follow up	Sally Oxenhandler	5d
<b>Partner With Others to Deliver Transportation Services – Kevin Keith (Page 6)</b>		
Number of dollars of discretionary funds allocated to Missouri	Todd Grosvenor	6a
Percent of earmarked dollars that represent MoDOT's high priority highway projects	Todd Grosvenor	6b
Number of dollars generated through cost-sharing and other partnering agreements	Todd Grosvenor	6c
<b>Leverage Transportation to Advance Economic Development – Roberta Broeker (Page 7)</b>		
Number of miles of new 4-lane corridors completed	Jay Bledsoe	7a
Percent utilization of SIB & STAR loan programs	Brenda Morris	7b
Economic return from transportation investment	Ben Reeser	7c
<b>Innovative Transportation Solutions – Mara Campbell (Page 8)</b>		
Number and percent of research recommendations implemented	Bill Stone	8a
Number of external awards received	Bill Stone	8b
Percent of best practices by implementation status	Bill Stone	8c
Number of dollars saved by increasing MoDOT's productivity	Jen Harper	8d

# TRACKER TABLE OF CONTENTS

<b>Fast Projects That Are of Great Value – Dave Nichols (Page 9)</b>		
Percent of programmed project cost as compared to final project cost	Renate Wilkinson	9a
Average number of years it takes to go from the programmed commitment in the Statewide Transportation Improvement Program to construction completion	Machelle Watkins	9b
Percent of projects completed within programmed amount	Dave Ahlvers	9c
Percent of projects completed on time	Dave Ahlvers	9d
Percent of change for finalized contracts	Dave Ahlvers	9e
Average construction cost per day by contract type	Dave Ahlvers	9f
Unit cost of construction expenditures	Kenneth Voss	9g
Annual dollar amount saved by implementing value engineering	Joe Jones	9h
Percent of customers who feel completed projects are the right transportation solutions	Kathy Harvey	9i
<b>Environmentally Responsible – Dave Nichols (Page 10)</b>		
Percent of projects completed without environmental violation	Kathy Harvey	10a
Number of projects MoDOT protects sensitive species or restores habitat	Gayle Unruh	10b
Ratio of acres of wetlands created compared to the number of acres of wetlands impacted	Gayle Unruh	10c
Percent of Missouri's clean air days	Eric Curtit	10d
Number of gallons of fuel consumed	Jeannie Wilson	10e
Number of historic resources avoided or protected as compared to those mitigated	Bob Reeder	10f
Number of tons of recycled/waste materials used in construction projects	Dave Ahlvers	10g
<b>Efficient Movement of Goods – Brian Weiler (Page 11)</b>		
Freight tonnage by mode	Ernie Perry	11a
Percent of trucks using advanced technology at Missouri weigh stations	Barb Hague	11b
Interstate motor carrier mileage	Joy Prenger	11c
Percent of satisfied motor carriers	DeAnne Rickabaugh	11d
Customer satisfaction with timeliness of Motor Carrier Services' response	DeAnne Rickabaugh	11e
<b>Easily Accessible Modal Choices – Brian Weiler (Page 12)</b>		
Number of airline passengers	Joe Pestka	12a
Number of daily scheduled airline flights	Joe Pestka	12b
Number of business-capable airports	Joe Pestka	12c
Number of transit passengers	Steve Billings	12d
Average number of days per week rural transit service is available	Steve Billings	12e
Number of intercity bus stops	Steve Billings	12f
Number of rail passengers	Rod Massman	12g
Number of passengers and vehicles transported by ferryboat	Sherrie Turley	12h
State funding for multimodal programs	Lisa Hueste	12i
Percent of customers satisfied with transportation options	Eric Curtit	12j
<b>Customer Involvement in Transportation Decision-Making – Dave Nichols (Page 13)</b>		
Number of customers who attend transportation-related meetings	Bob Brendel	13a
Percent of customers who are satisfied with feedback they receive from MoDOT after offering comments	Bob Brendel	13b
MoDOT takes into consideration customers' needs and views in transportation decision-making	Sue Cox	13c
Percent of positive feedback responses received from planning partners regarding involvement in transportation decision-making	Sue Cox	13d
<b>Convenient, Clean &amp; Safe Roadside Accommodations – Don Hillis (Page 14)</b>		
Percent of customers satisfied with rest areas' convenience, cleanliness and safety	Jim Carney	14a
Percent of customers satisfied with commuter lots' convenience, cleanliness and safety	Tim Chojnacki	14b
Number of users of commuter parking lots	Tim Chojnacki	14c
Number of users of rest areas	Stacy Armstrong	14d
Number of truck customers that utilize rest areas	Tim Jackson	14e

# TRACKER TABLE OF CONTENTS


<b>Best Value for Every Dollar Spent – Roberta Broeker (Page 15)</b>		
Ratio of lane miles per full-time equivalency	Steve Meystrik	15a
Number of full-time equivalencies	Steve Meystrik	15b
Percent of work capacity based on average hours worked	Micki Knudsen	15c
Rate of employee turnover	Kim Hickey	15d
Level of job satisfaction	Paul Imhoff	15e
Number of lost workdays per year	Jeff Padgett	15f
Rate and total of OSHA recordable incidents	Jeff Padgett	15g
Number of claims for general liability	Jeff Padgett	15h
Cost and usage of utilities for facilities	Doug Record	15i
Fleet status	Jeannie Wilson	15j
Percent of vendor invoices paid on time	Debbie Rickard	15k
Distribution of expenditures	Debbie Rickard	15l
Accuracy of state revenue projections	Ben Reeser	15m
MoDOT national ranking in revenue per mile	Ben Reeser	15n
Number of excess properties conveyed and gross revenue generated from excess properties sold	Kelly Lucas	15o
<b>Attractive Roadsides – Don Hillis (Page 16)</b>		
Percent of roadsides that meet customers' expectations	Mike Shea	16a
Number of miles in Adopt-A-Highway program	Stacy Armstrong	16b
<b>Advocate for Transportation Issues – Pete Rahn (Page 17)</b>		
Percent of minorities and females employed	Rudy Nickens	17a
Separation rates for females and minorities	Rudy Nickens	17b
Transportation-related legislation filed and passed by the General Assembly	Lisa Lemaster	17c
Number of federal earmarked projects on the state's transportation system	Jay Wunderlich	17d
Percent of customers who view MoDOT as Missouri's transportation expert	Jay Wunderlich	17e
<b>Accurate, Timely, Understandable and Proactive Transportation Information (Outbound) – Shane Peck (Page 18)</b>		
Number of public appearances	Sally Oxenhandler	18a
Percent of customers who feel MoDOT provides timely, accurate and understandable information	Sally Oxenhandler	18b
Number of contacts initiated by MoDOT to media	Kristi Jamison	18c
Percent of MoDOT information that meets the media's expectations	Kristi Jamison	18d
Percent of positive newspaper editorials	Kristi Jamison	18e
Number of overall visitors to MoDOT's web site	Matt Hiebert	18f
<b>American Recovery and Reinvestment Act – Dave Nichols (Page 19)</b>		
Recovery Act projects and dollars awarded to date	Jay Bestgen	19a
Recovery Act funds obligated and expended to date by funding category	Jay Bestgen	19b
Recovery Act project dollars awarded versus budget	Jay Bestgen	19c
Recovery Act direct jobs supported	Travis Koestner	19d
Percent of Recovery Act Multimodal project dollars obligated to date	Joe Pestka	19e





# UNINTERRUPTED TRAFFIC FLOW

*Tangible Result Driver – Don Hillis, Director of System Management*



Missouri drivers expect to get to their destinations on time, without delays. Traffic, changes in weather, work zones and highway incidents can all impact their travel. MoDOT works to ensure that motorists travel as efficiently as possible on the state system by better managing work zones, snow removal and highway incidents, and by using the latest technology to inform motorists of possible delays and available options. Better traffic flow means fewer crashes.



### Average travel indices and speeds on selected freeway sections - 1a

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Troy Pinkerton, Traffic Liaison Engineer

#### Purpose of the Measure:

This measure tracks the average travel index values and average speeds on various freeway sections. The desired trend is for the travel index to remain at or near a value of 1.00. A value of 1.00 is representative of a free-flow condition. The travel index is directly related to the average speed and represents the level of congestion by taking into consideration not only average speed but also the traffic volumes. The travel index is calculated according to the following equation:

$$\text{Travel Index} = \text{Average speed} / \text{Free flow speed}$$

Average speeds are taken from sensor data. The free-flow speed is constant and is equal to the highest hourly average speed for any hour in that data set.

#### Measurement and Data Collection:

Data from the St. Louis and Kansas City regions are provided by MoDOT's traffic management centers. Information about the St. Louis traffic management center, Gateway Guide, can be found at <http://www.gatewayguide.com> and information about the traffic management center in Kansas City, KC Scout, can be found at <http://www.kcscout.net/>. Data for the St. Louis region is also provided through a partnership with *Traffic.com*. Data for each location is updated quarterly.

#### Improvement Status:

##### Kansas City metropolitan region:

As shown on the graph, the freeway systems in the Kansas City region continue to perform in the mid to upper-80 percentile range during the peak hours, as compared to the free-flow condition. The morning peak dropped slightly from 0.87 in the first quarter of fiscal year 2010 to 0.86 in the second quarter of fiscal year 2010. The evening peak also decreased from 0.89 to 0.87.

The KCicon project has made some significant changes in lane configurations on I-35 causing some additional slow downs specifically in the AM peak in the southbound direction.

The I-435 Blue Ridge construction has concluded but Kansas City is seeing increased volume throughout this area due to commercial development opening up. On November 30, 2009, a 13.5-hour sulfide spill incident caused issues on northbound I-35.

The inclement weather in December proved to have a significant impact on the averages for this month in particular. During the six days of the Christmas holiday, the index dropped to about 0.52.

Most of the Kansas City region has been free from significant work zone impacts. Construction associated with the Paseo Bridge continues to contribute to some slow downs in the morning commute southbound into downtown. This area should see some dramatic slow downs over the next few years due to the KC ICON bridge replacement project. Additional information on the construction activities along I-29/35 can be found at [www.kcicon.org](http://www.kcicon.org).

##### St. Louis metropolitan region:

As shown on the graph, the freeway systems in the St. Louis region are performing in the 90-percentile range in the morning and the 80-percentile range in the evening for this quarter. The morning peak travel index increased from 0.87 last quarter to 0.90 in the second quarter of fiscal year 2010. The evening peak travel index decreased slightly from 0.81 to 0.80.

The amount of incidents (crashes, work zones, and special events) for this quarter was slightly higher than the previous quarter. However, the average duration and time within a lane for all incidents was almost identical to first quarter FY10. Due to the fact that incidents are responsible for about half of all delay in urban areas, and because there were no significant changes in traffic volume in St. Louis, it can be inferred that these are the reasons for the travel index to be very similar to first quarter FY10 (only a .03 difference in the AM peak, and a .01 difference in the PM peak). The closure of a portion of I-64 was the major traffic impact until December 7, 2009, when it was fully opened. Traffic patterns were significantly changed throughout the area near the I-64 closure, but these changes may not have been fully realized due to the roadway opening so late in the quarter. It is expected the change in travel index, if any, will be most noticeable in the third quarter FY10 data.



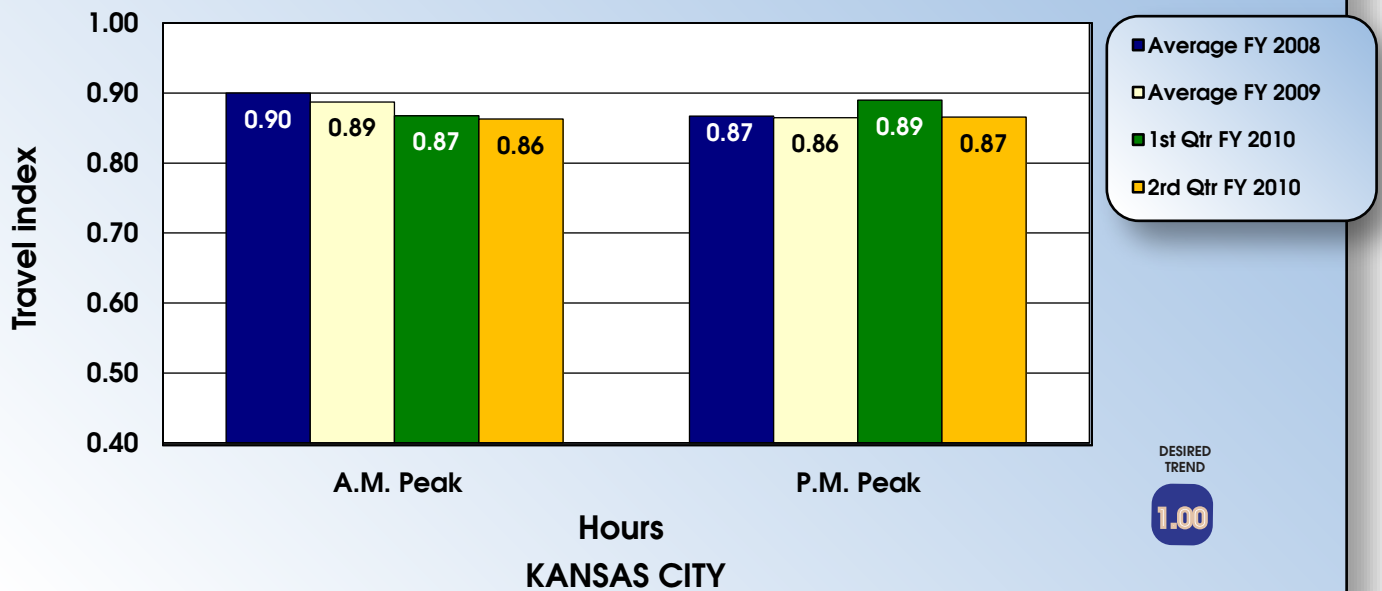
## Statewide:

The statewide average speed on rural routes continues to perform efficiently, recorded at 69.60 miles per hour for this quarter, which is a slight decrease from last quarters reading of 69.77. We experienced equipment problems at three of our eight sensed locations. I-29 at Mound City and I-44 at Waynesville had equipment problems in October, resulting in no data to report for this month. The data for November 2009 for I-435 in Kansas City is only for the southbound side due to equipment problems that

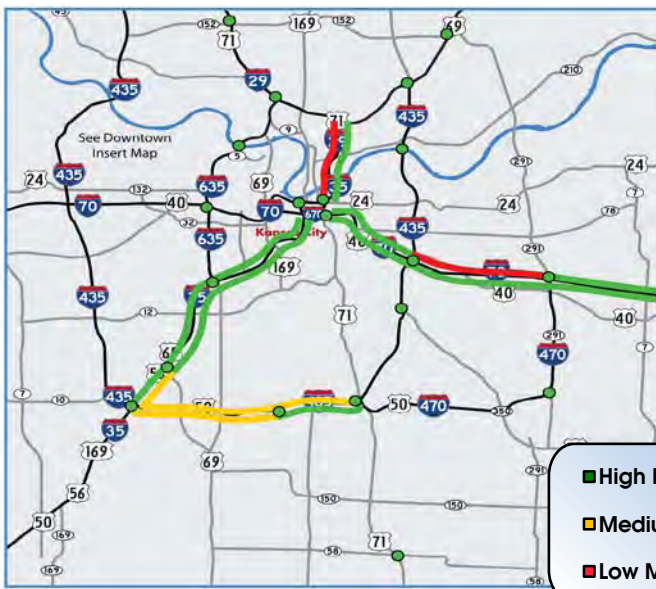
caused the northbound side on this site to become 'county' only in November.

Expect several resurfacing projects on rural interstates this upcoming construction season funded both from traditional sources as well as from the American Recovery and Reinvestment Act. A list project activities can be found at [www.modot.org](http://www.modot.org).

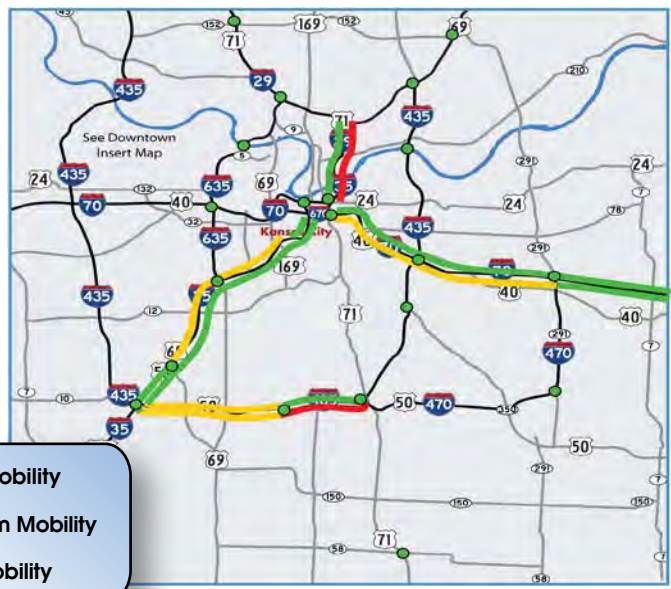
## Travel Index on Selected Freeway Sections Kansas City Metropolitan Averages



## AM – Regional Mobility

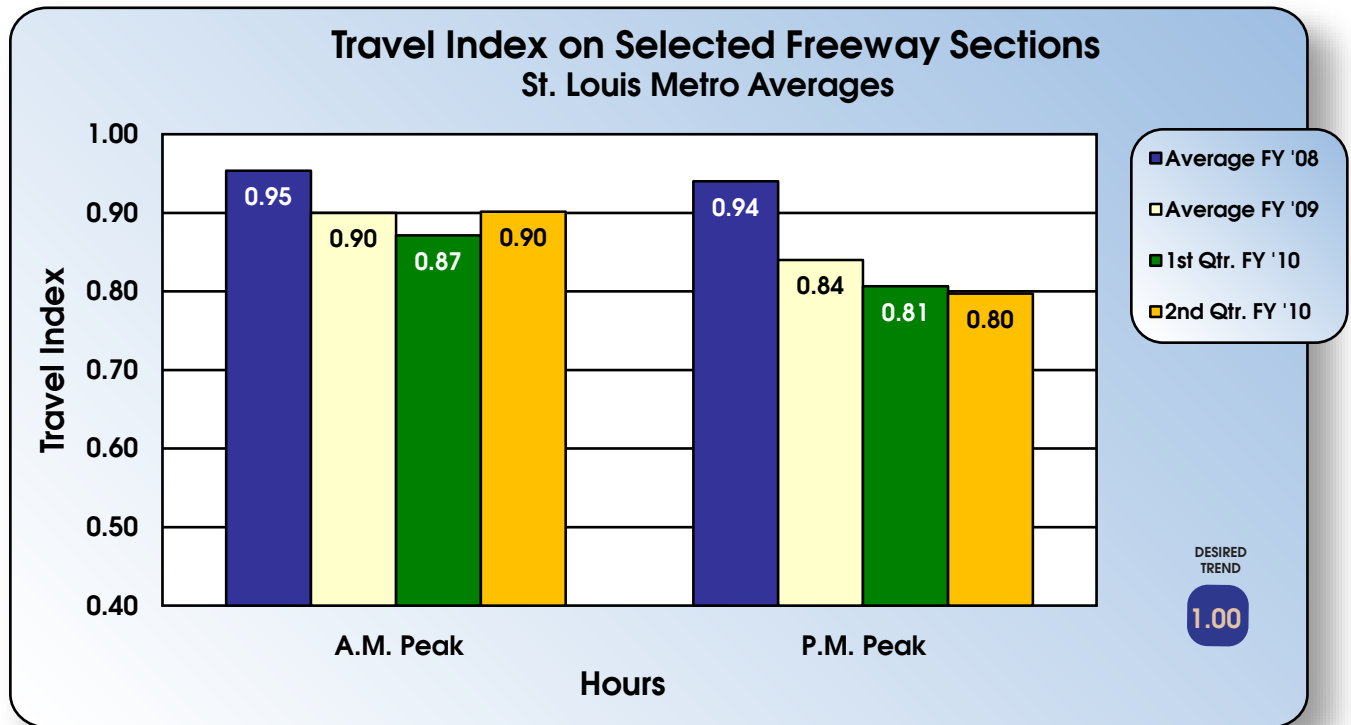


## PM – Regional Mobility





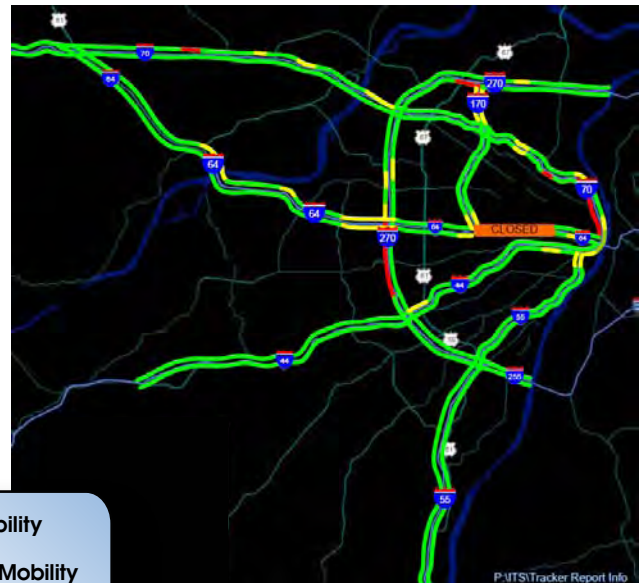
## UNINTERRUPTED TRAFFIC FLOW



AM – Regional Mobility

ST. LOUIS

PM – Regional Mobility



■ High Mobility  
■ Medium Mobility  
■ Low Mobility

## Average rate of travel on selected signalized routes-1b

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Julie Stotlemeyer, Traffic Liaison Engineer

### Purpose of the Measure:

This measure indicates how well selected arterials across the state are operating during peak traffic times. As improvements are made, such as signal timing or access management, this measure will show the effects of those efforts and decisions on the arterial system.

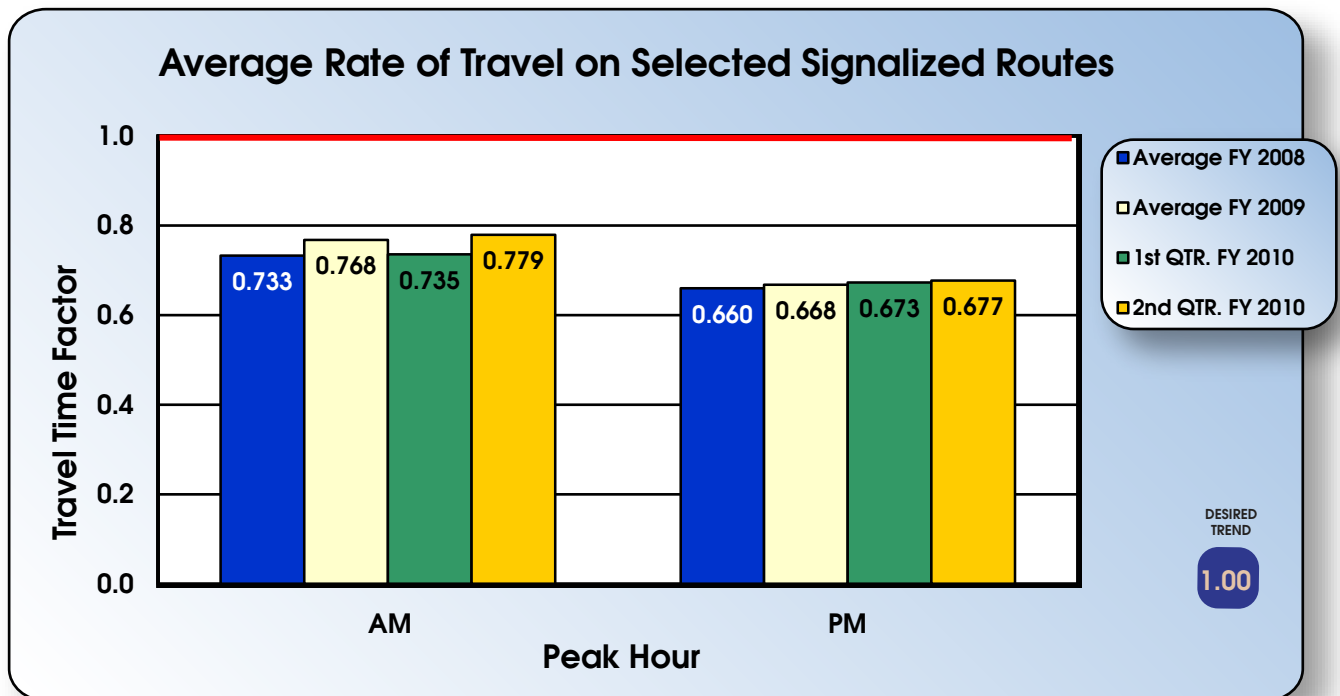
### Measurement and Data Collection:

Travel times are measured on various arterials. Data is collected from driving each route twice during a.m. and p.m. peak times and timing how long it takes to traverse the route. The travel time is compared to the speed limit and the travel time factor determined. As the travel time factor approaches 1.00, traffic is moving at the speed limit. Data collection began in the second quarter of fiscal year 2007. Data for this measure is updated quarterly.

### Improvement Status:

For second quarter fiscal year 2010, the average statewide travel time factor for a.m. peak is 0.779 and p.m. peak is 0.677. Overall performance is 0.728. The a.m. peak travel time factor is approximately 10 percent higher than p.m. peak travel time factor. Second quarter data shows the a.m. peak for arterials and p.m. peak for arterials operating higher than the average for fiscal year 2008 and the average for fiscal year 2009. For second quarter fiscal year 2010, the a.m. peak travel time factor and the p.m. peak travel time factor is approximately two percent higher than the second quarter fiscal year 2009 a.m. and p.m. peak travel time factors, respectively.

The average rate of travel on selected signalized routes has changed due to construction, weather conditions, variations in traffic flow, timing changes, and installation of a traffic adaptive system.



### Average time to clear traffic incident-1c

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Rick Bennett, Traffic Liaison Engineer

#### Purpose of the Measure:

This measure is used to determine the trends in incident clearance on the state highway system. A traffic incident is an unplanned event that creates a temporary reduction in the number of vehicles that can travel on the road. The sooner an incident is removed, the sooner the highway system returns to normal capacity. Therefore, responding to and quickly addressing the incidents (crashes, flat tires and stalled vehicles) improves system performance.

#### Measurement and Data Collection:

Advanced Transportation Management Systems (ATMS) are used by both the Kansas City and St. Louis traffic management centers to record “incident start time” and the time for “all lanes cleared.” In October of 2008, St. Louis switched from using motorist assist arrival times as the “incident start time” to utilizing the time the incident was confirmed in the ATMS usually via CCTV, prior to any responder arriving on the scene, as the “incident start time.” Average time to clear traffic incidents is calculated from these times. In January of 2009, about 20 additional miles of I-70, I-470, and I-435 were added and became operational in the Kansas City urban area.

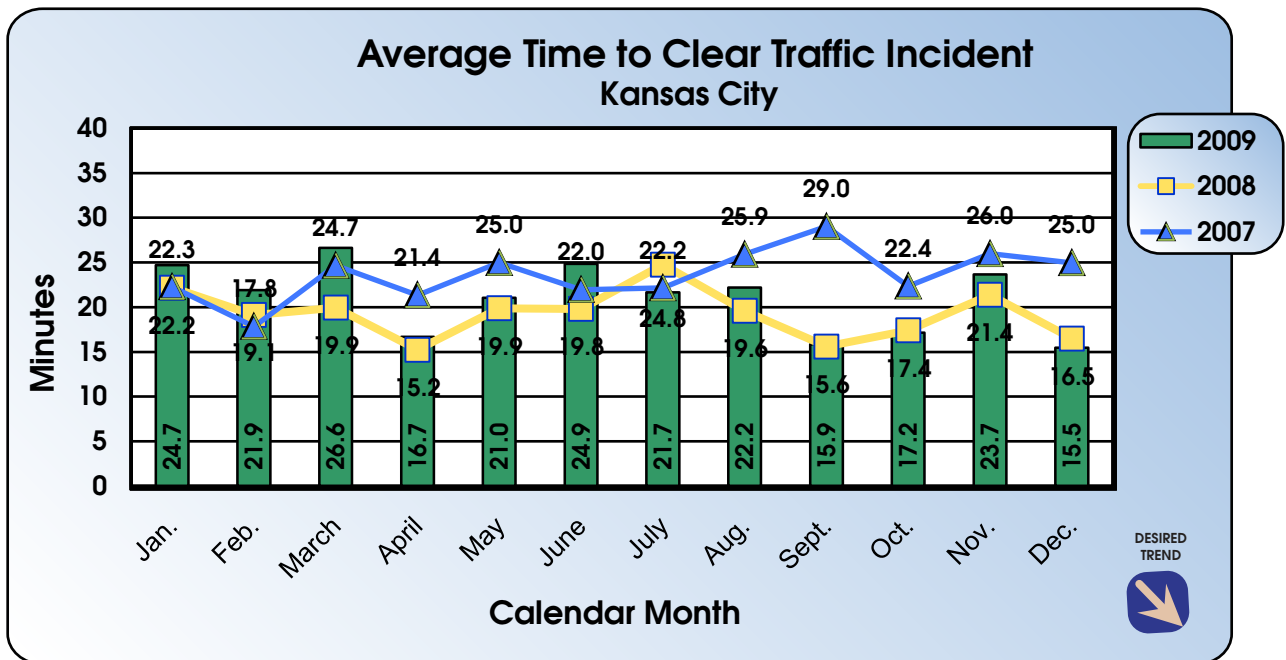
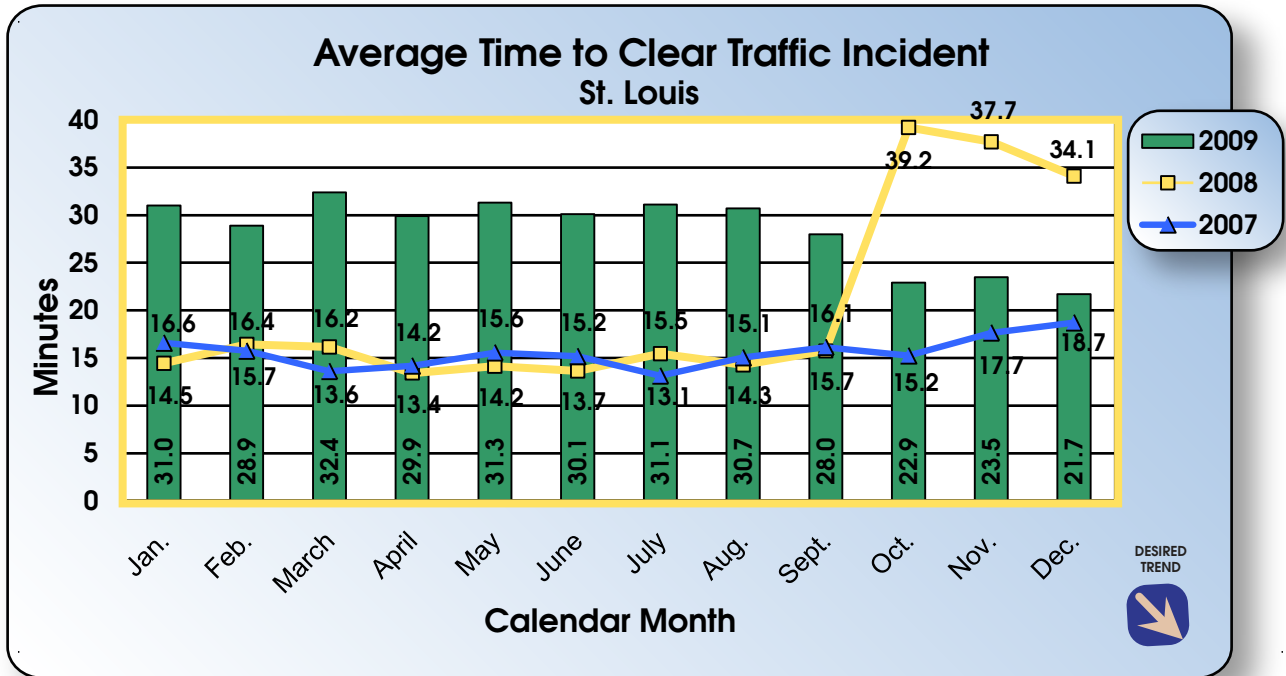
On September 1, 2009, Kansas City moved to a new software and hardware platform, (TranSuite and SQL), giving them the ability to do more detailed tracking of time to clear incidents, Motorist Assist activities and interoperability with Operation Greenlight and the arterial signal systems.

#### Improvement Status:

St. Louis recorded 691, 530, and 661 incidents respectively for the months of October, November and December utilizing ATMS. St. Louis’ data includes considerably more incidents because St. Louis monitors more freeway miles than the Kansas City area.

Kansas City collected data on 446, 406, and 733 incidents respectively for the months of October, November and December. On November 30, 2009, a semi truck overturned on the Paseo Bridge that closed both the northbound and southbound directions of travel. The northbound lanes were closed for 13.5 hours and the southbound lanes were closed for nine hours.







### Average time to clear traffic backup from incident-1d

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Rick Bennett, Traffic Liaison Engineer

#### Purpose of the Measure:

This measure tracks the amount of time it takes to return traffic flow back to normal after a traffic incident. A traffic incident is any unplanned event that creates a temporary reduction in the number of vehicles that can travel on the road.

#### Measurement and Data Collection:

“All lanes cleared” and “clear backup” times are being recorded by MoDOT’s Traffic Management Centers in Kansas City and St. Louis. Average times to clear traffic backups are calculated from these recorded times. Kansas City reports capture when a backup is relieved as an automated process. The Kansas City area has devices to collect data along portions of interstates 435 and 70. In October 2008, St. Louis began using advanced transportation management system (ATMS) devices to collect data. The number of incidents that data is collected on in St. Louis has gone from approximately 50 to 500.

#### Improvement Status:

St. Louis area routes have larger traffic volumes that create more significant congestion problems than in Kansas City.

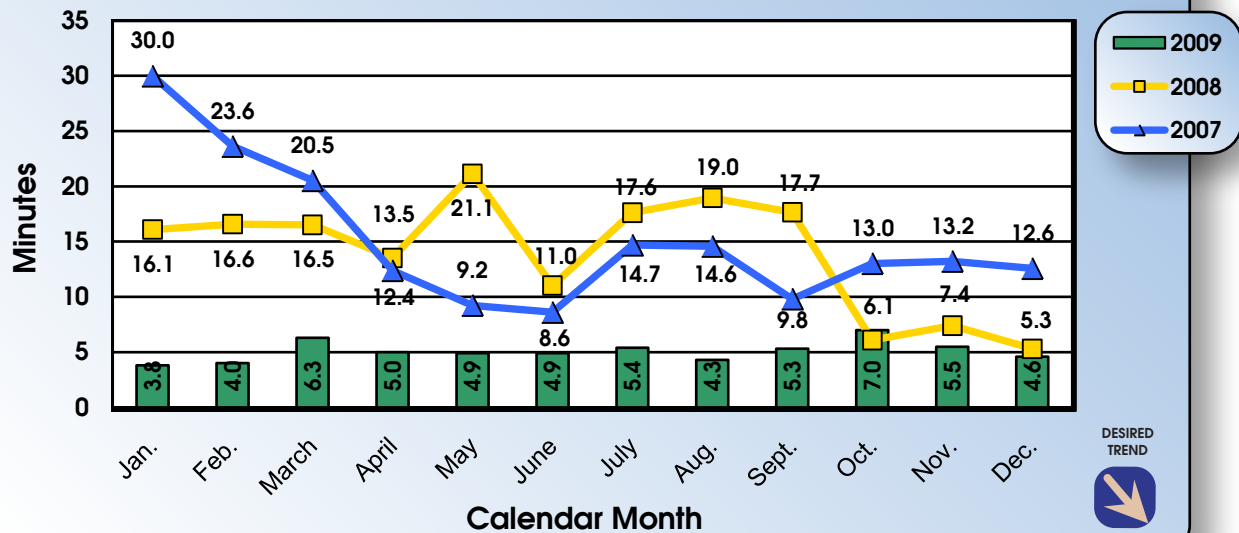
St. Louis’ times to clear traffic backup continue to show a marked decrease from previous years. This is due to the increase in the number of incidents for which data is being reported. Prior to October 2008, the only incidents for which data was available were those incidents the TMC could monitor by camera. As a result of the increase in data collected due to the

improvements to the ATMS system, St. Louis shows a much lower average time to clear traffic backup. In October, there were 13 reported incidents with a time to clear the backup of over 60 minutes, with one incident having a backup clearance time in excess of 160 minutes. Most of these incidents occurred during rain events, which likely contributed to the higher time to clear backup. These incidents increased the average for the month of October.

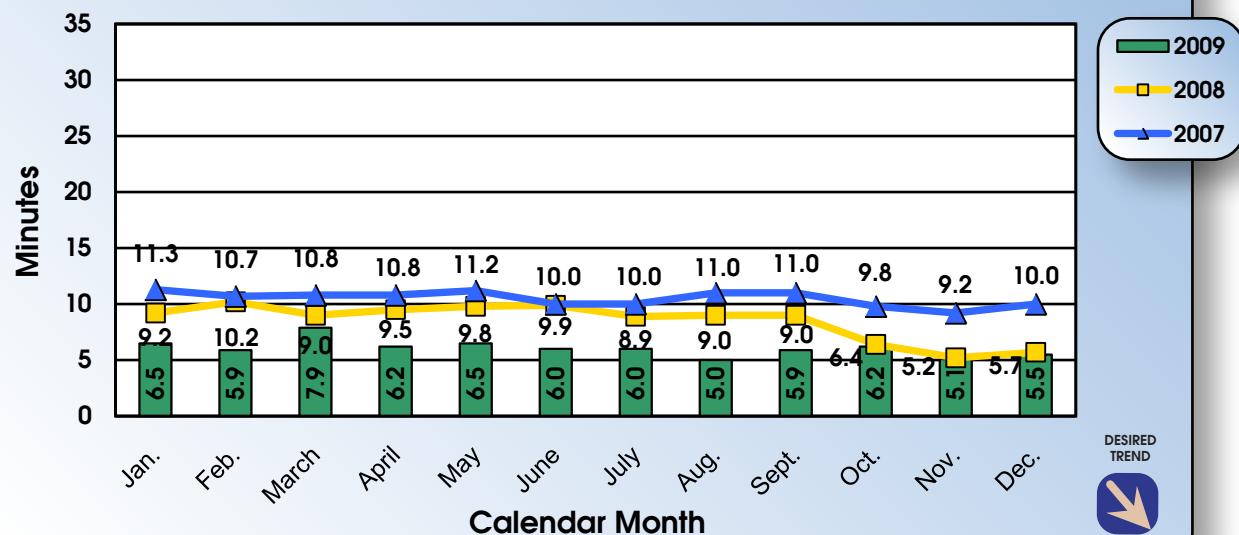
Kansas City continues to have fairly consistent times to clear backup from an incident. Renewed efforts in developing long-term partnerships with local agencies and law enforcement have increased the awareness of MoDOT’s expectations for quick clearance and open roadways.



**Average Time to Clear Traffic Backup From Incident  
St. Louis**



**Average Time to Clear Traffic Backup From Incident  
Kansas City**



### Number of customers assisted by the Motorist Assist program -1e

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Rick Bennett, Traffic Liaison Engineer

#### Purpose of the Measure:

This measure is used to gauge the use of the Motorist Assist programs on our state roadways, because traffic incidents impact Missouri's transportation system capacity. An incident is any unplanned event that creates a temporary reduction in roadway capacity that impedes normal traffic flow. The sooner an incident is removed, the sooner the highway system returns to normal capacity. Therefore, responding to and quickly addressing the incidents (crashes, flat tires and stalled vehicles) improves system performance. MoDOT's Motorist Assist operators are able to respond to nearly every incident, major or minor, in the areas they cover.

#### Measurement and Data Collection:

The Motorist Assist operators record each assist and then prepare a monthly summary. Kansas City operators patrol approximately 105 freeway miles. In October 2008, St. Louis added a 22-mile section of I-55 to their patrol route, which brings the total freeway miles St. Louis operators patrol to approximately 192.

In January 2008, MoDOT partnered with St. Louis County to develop the Interstate 64 Traffic Response Service Patrol to ease congestion created by the reconstruction on the I-64 corridor. The I-64 Traffic Response Service Patrol provides similar services to motorists as the MoDOT Motorist Assist program on the arterials impacted by the closure of I-64. The I-64 Traffic Response Service Patrol records each assist and prepares a monthly report. Due to the

completion of the I-64 project, the Interstate 64 Traffic Response Service Patrol was discontinued December 12, 2009. In the nearly 2 -year time span of the program, 31,812 assists were provided.

#### Improvement Status:

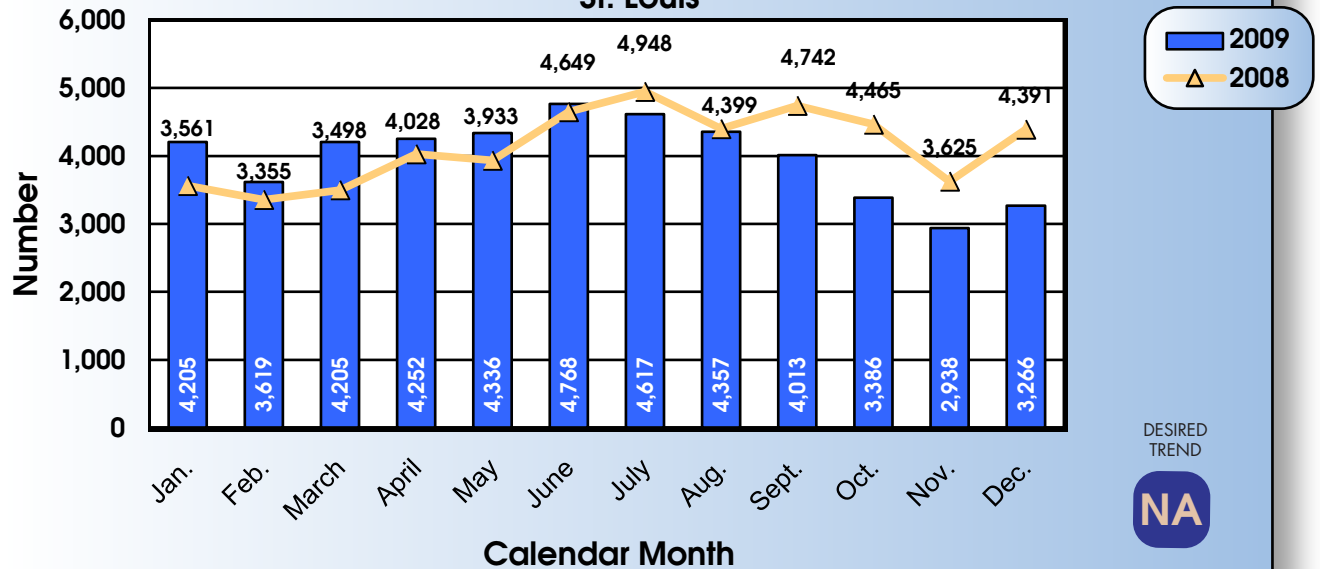
This data demonstrates that the Motorist Assist program in both St. Louis and Kansas City continue to provide a valuable service to motorists on the urban freeways in both metropolitan areas.

In St. Louis, the trend line for the last quarter is consistent with previous years, holiday season and winter months. However, the decline in assists for the past two quarters and yearly total is reflective of declining staffing levels since July. For the fourth quarter, Motorist Assist operators would assume responsibility for the I-64 Traffic Response routes in the event that organization was shorthanded. This was a commitment made by the district to provide a fully functioning operation for the I-64 Traffic Response. Unfortunately, this left three designated Motorist Routes being covered by adjacent Motorist Assist operators. These manhour shortages contributed to the reduced overall number of assists for the Motorist Assist organization.

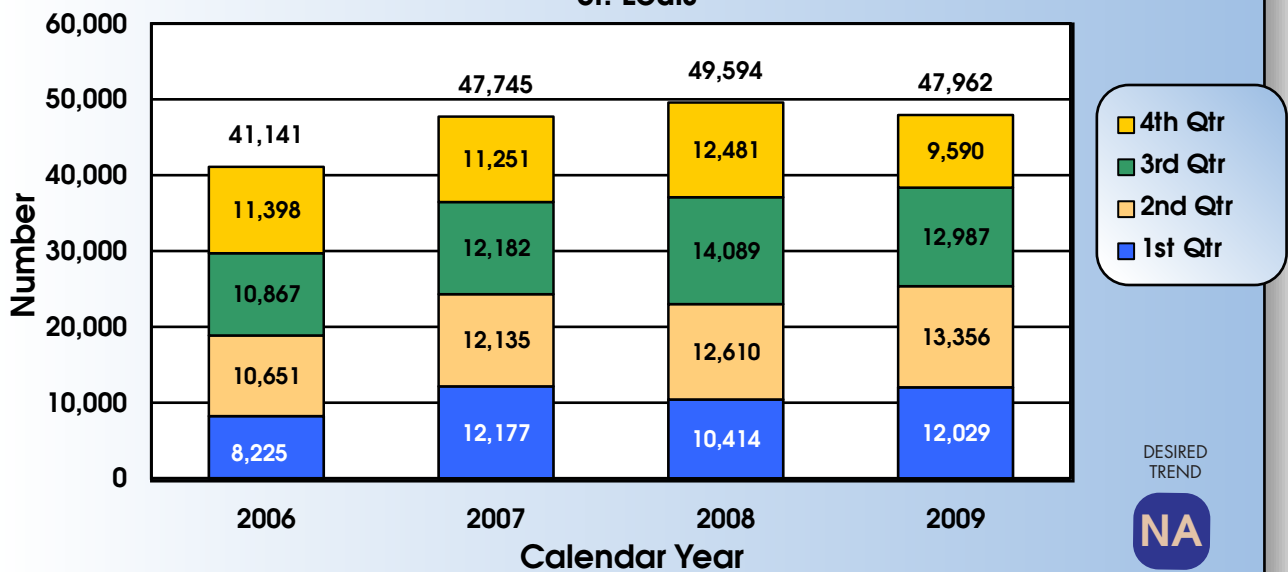
Over the last year, the motorist assist program in Kansas City has expanded coverage to seven days a week. This has resulted in a marked increase in the number of assists provided.



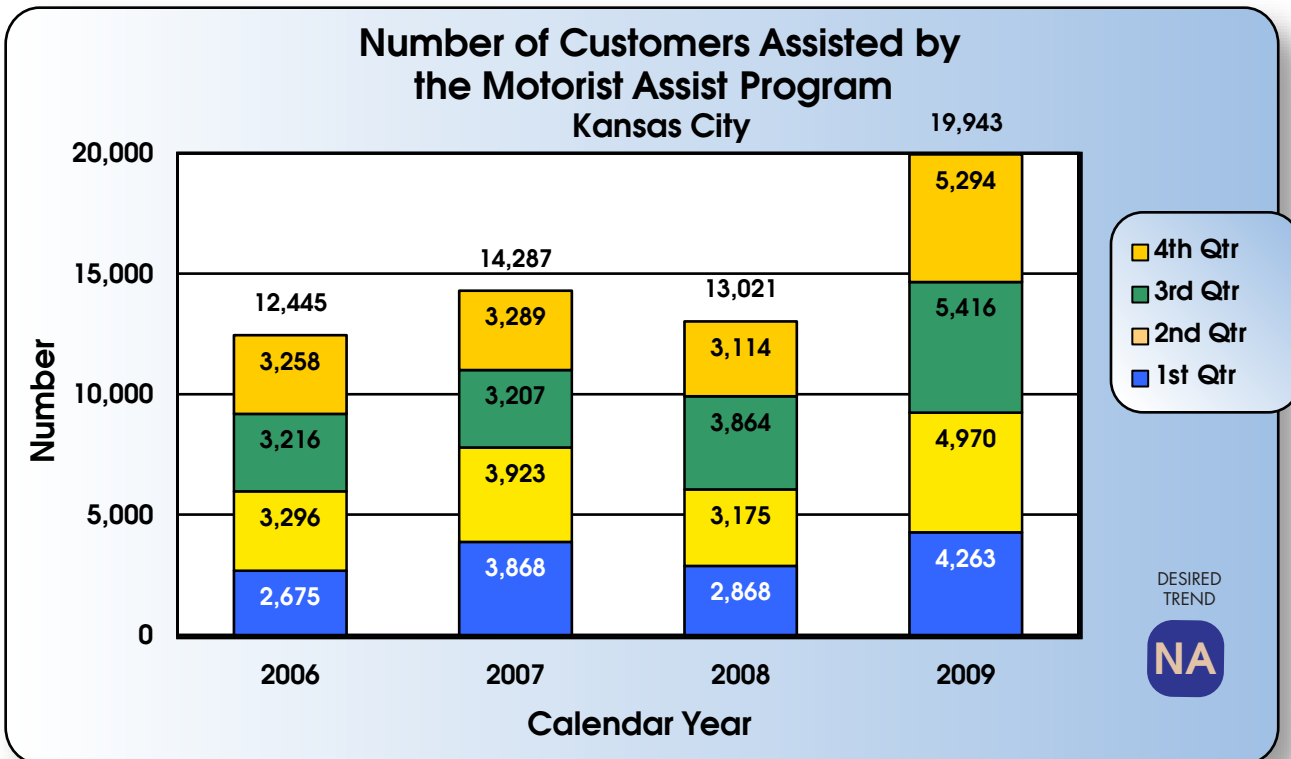
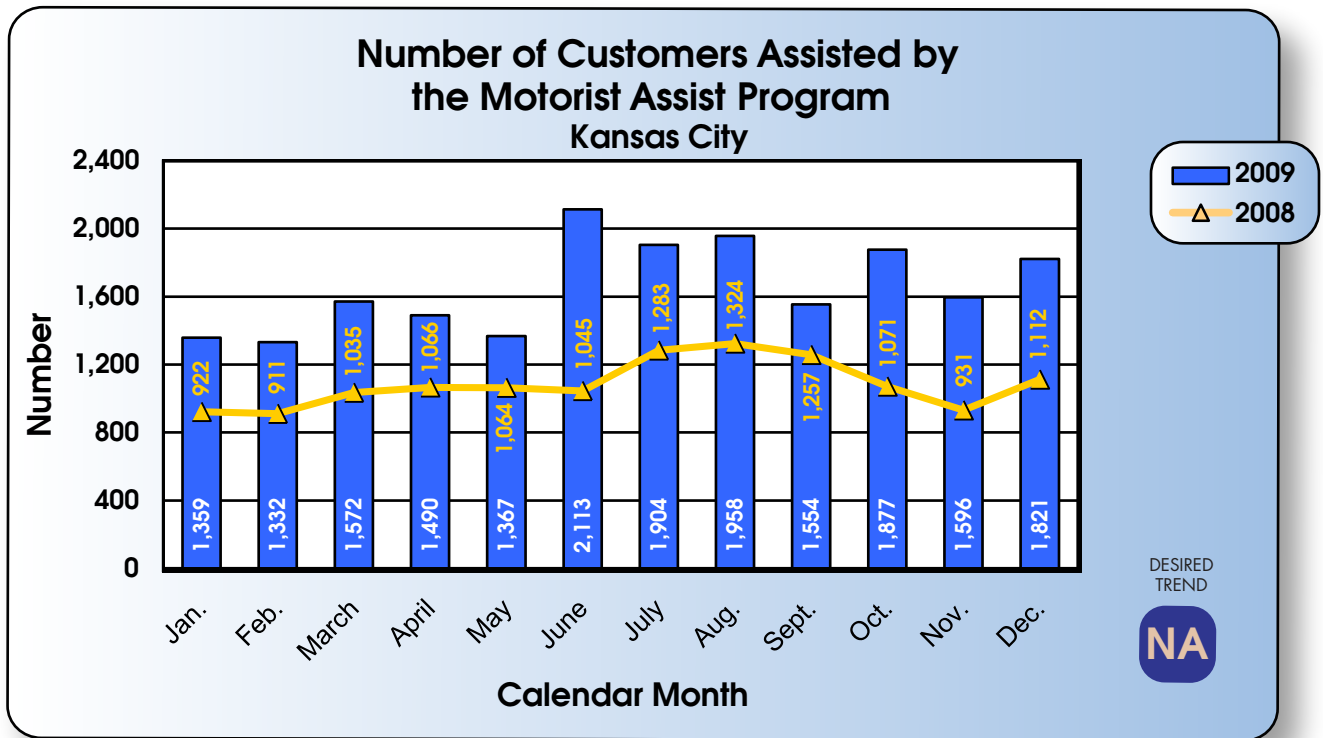
**Number of Customers Assisted by  
the Motorist Assist Program  
St. Louis**

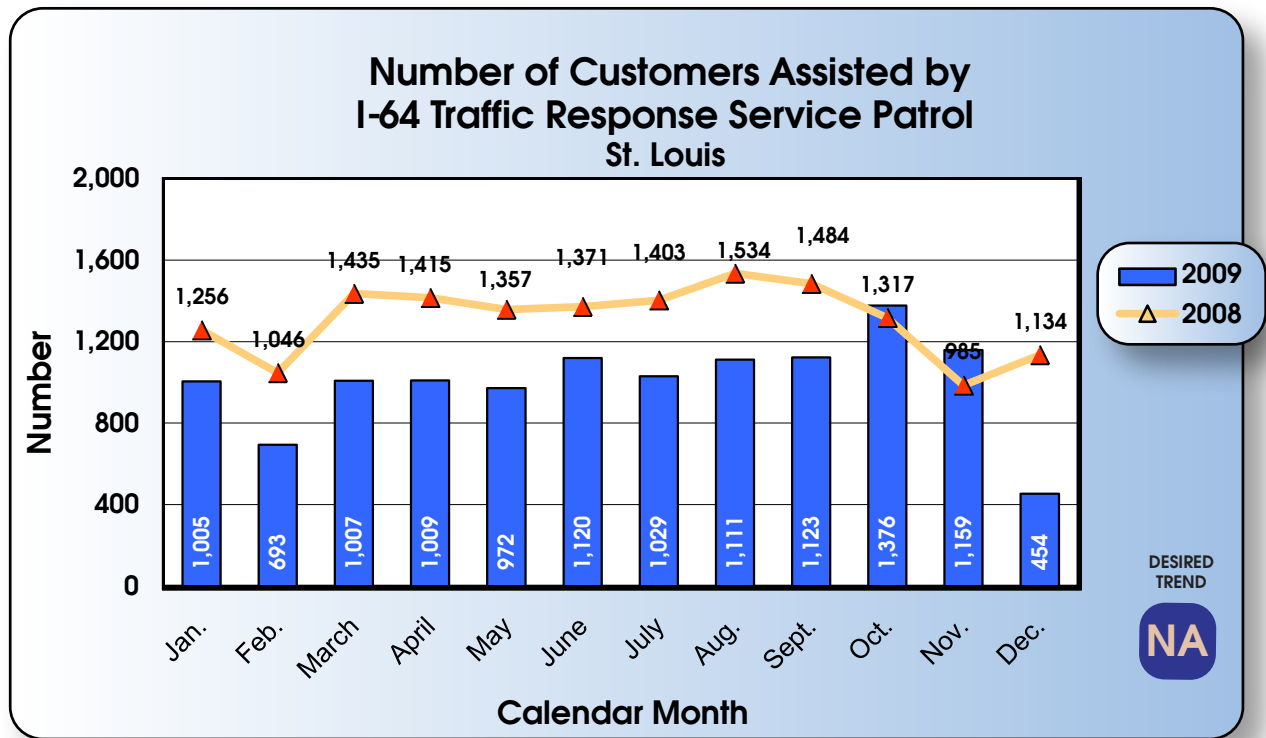


**Number of Customers Assisted by  
the Motorist Assist Program  
St. Louis**









### Percent of Motorist Assist customers who are satisfied with the service-1f

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Rick Bennett, Traffic Liaison Engineer

#### Purpose of the Measure:

This measure helps evaluate services provided through MoDOT's Motorist Assist Program, specifically, whether the customers who use the program are satisfied with the service. Information received provides direction on how to better serve our customers and keep traffic moving safely and efficiently.

#### Measurement and Data Collection:

Motorist Assist operators distribute survey cards to customers. Data from the cards is compiled and tabulated by Heartland Market Research, LLC. Surveys with selections identifying that the service was "probably" or "definitely" valuable were tabulated as "satisfied" for this measure.

In January 2008, MoDOT partnered with St. Louis County to develop the Interstate 64 Traffic Response Service Patrol to ease congestion created by the reconstruction on the I-64 corridor. The I-64 Traffic Response Service Patrol provides similar services to motorists as the MoDOT Motorist Assist program, however, it patrols the arterials impacted by the closure of I-64. The I-64 Traffic Response Service Patrol distributes a separate but similar survey card to its customers. Upon completion of the I-64 project, the Interstate 64 Traffic Response Service Patrol was discontinued December 12, 2009.

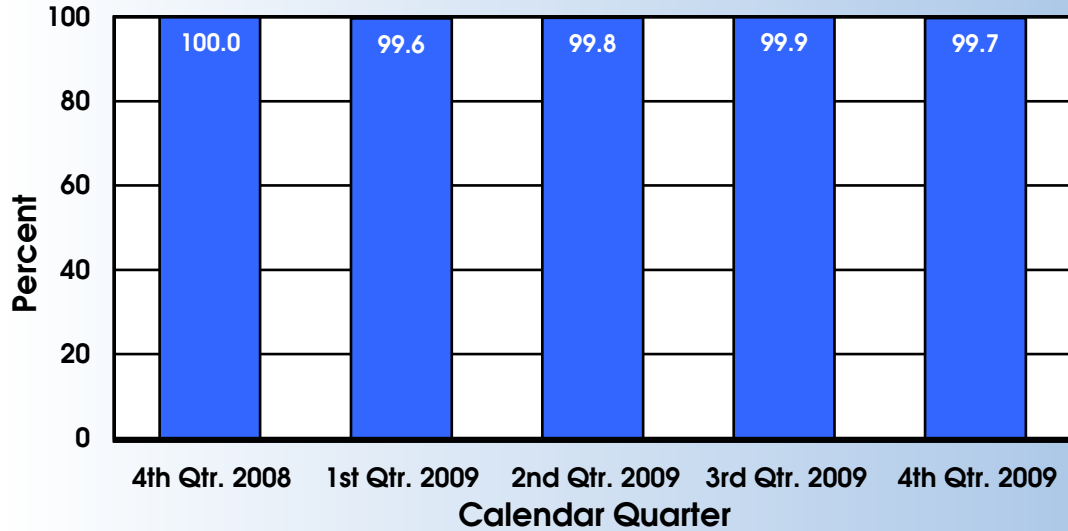
#### Improvement Status:

This data agrees with information provided by customers on prior comment forms - almost all customers are satisfied.

- **Fourth Quarter 2008,**
  - 1,366 Motorist Assist surveys received
  - 142 I-64 Traffic Response surveys received
- **First Quarter 2009,**
  - 1,413 Motorist Assist surveys received
  - 126 I-64 Traffic Response surveys received
- **Second Quarter 2009,**
  - 1,504 Motorist Assist surveys received
  - 124 I-64 Traffic Response surveys received
- **Third Quarter 2009,**
  - 1,592 Motorist Assist surveys received
  - 164 I-64 Traffic Response surveys received
- **Fourth Quarter 2009,**
  - 1,010 Motorist Assist surveys received
  - 153 I-64 Traffic Response surveys received



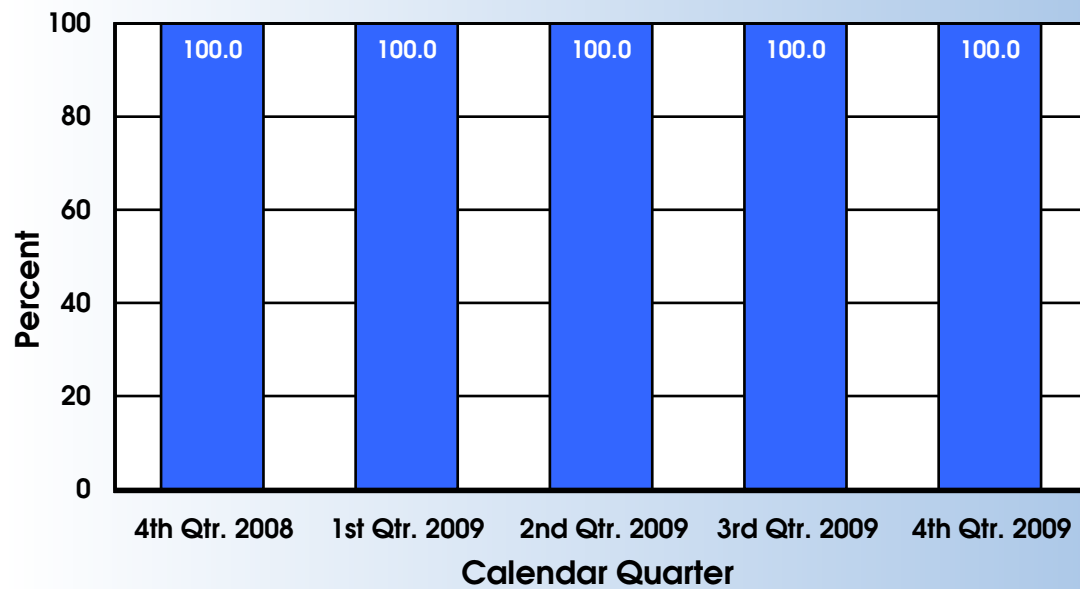
**Percent of Motorist Assist Customers Who Are Satisfied With the Service**



DESIRED  
TREND



**Percent of I-64 Traffic Response Service Patrol Customers Who Are Satisfied With the Service**



DESIRED  
TREND



### Percent of work zones meeting expectations for traffic flow -1g

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Dan Smith, Traffic Management & Operations Engineer

#### Purpose of the Measure:

An important factor in evaluating the department's performance in temporary traffic control design, deployment, operation and maintenance is the measurement of work zones' affect on the mobility of highway users. This measure tracks how well the department meets customer expectations of traffic flow in, around and through work zones on state highways.

#### Measurement and Data Collection:

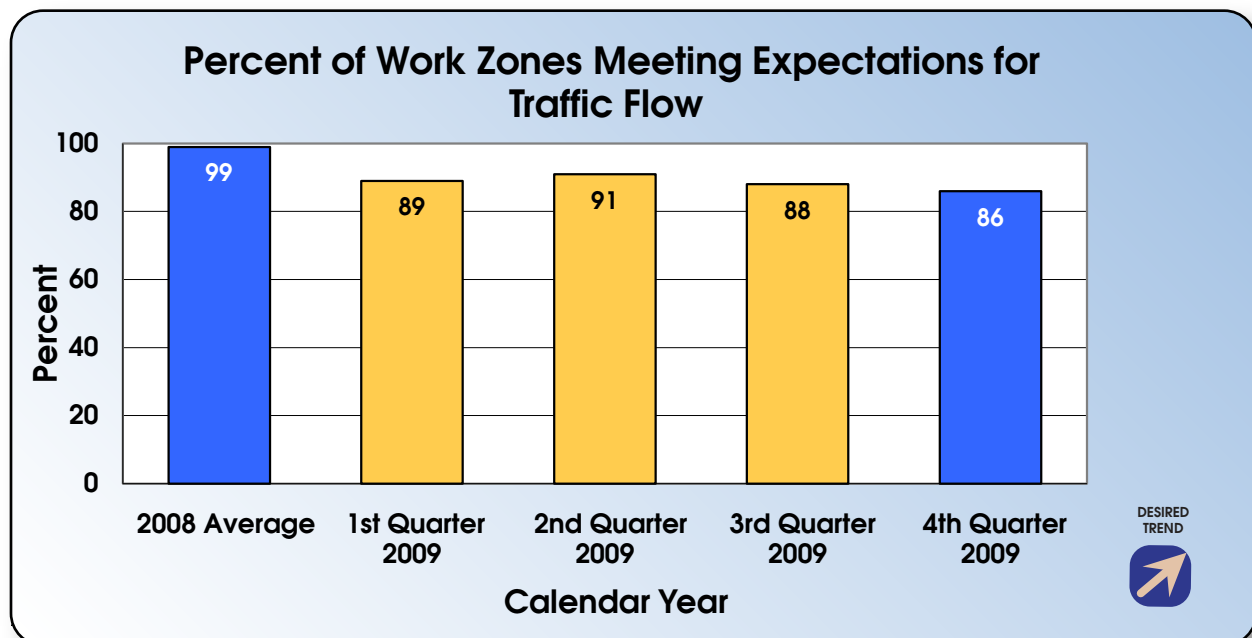
On January 1, 2009, MoDOT provided a Work Zone Customer Survey for the traveling public to provide evaluation of the mobility in work zones across the state. Each survey has several questions that address the sign and flagger instructions, speed limit, travel time, and travel safety. The evaluator assigns a yes, no, or n/a rating to each of the questions. The overall ratings are compiled quarterly and reported via this

measurement. The survey is on the MoDOT website at the following

address: <http://www.modot.gov/workzones/Comments.htm>.

#### Improvement Status:

Compilation of the 2,172 surveys completed by the traveling public and MoDOT staff between January and December of this calendar year resulted in a decrease of positive satisfaction rating from 88 to 86 percent for work zone traffic flow. Since this is the first year the traveling public has had an opportunity to provide formal feedback on work zones, no historical data is available. For comparison purposes, the 2008 yearly average results of our technical staff inspections are included. The revised evaluation technique will allow MoDOT to align our priorities with that of our customers.





## Time to meet winter storm event performance objectives on major and minor highways-1h

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Tim Jackson, Maintenance Liaison Engineer

### Purpose of the Measure:

This measure tracks the amount of time needed to perform MoDOT's snow and ice removal efforts.

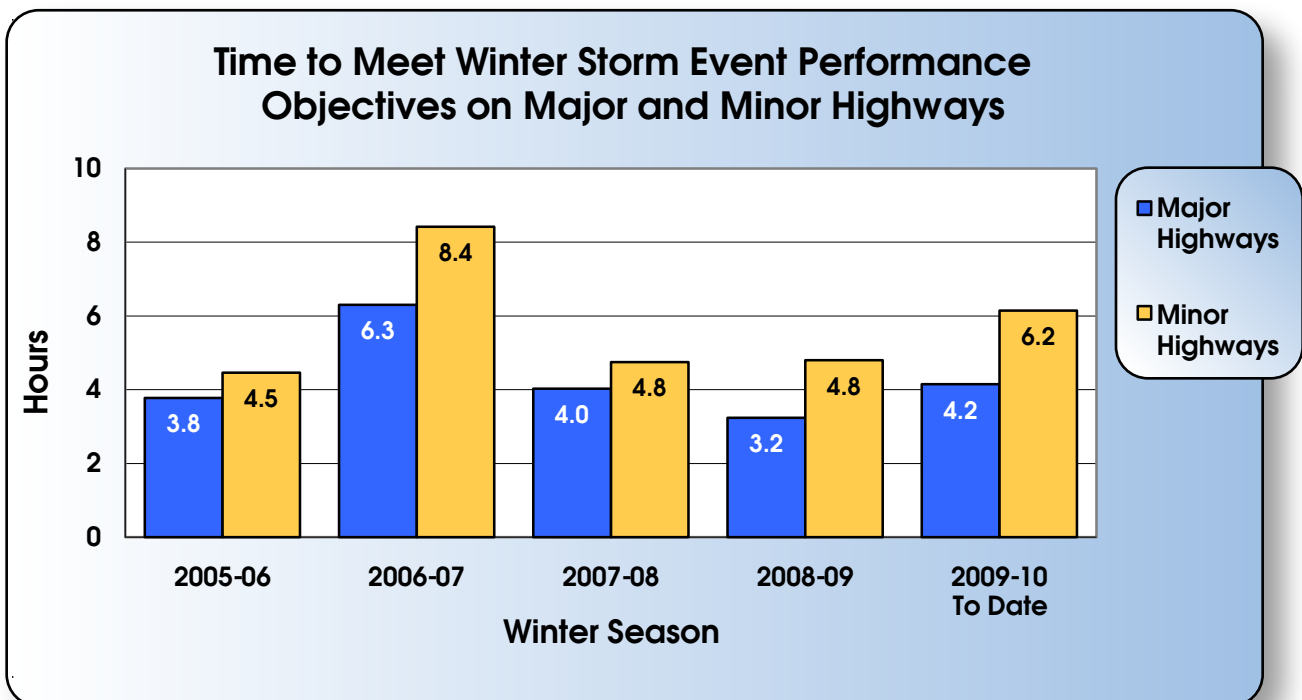
### Measurement and Data Collection:

This data is collected in the winter event database. This measurement tracks the actual time involved in this process so improvements can be made. After each winter event, such as a snow or ice storm, area maintenance personnel submit a report indicating how much time it took to clear snow from the major and minor highways. After a storm ends, the objectives are to restore the major highways to a clear condition as soon as possible and have the lower-volume minor highways open to two-way traffic and treated with salt and/or abrasives at critical areas such as intersections, hills and curves as soon as possible. The end of the storm is defined as when freezing precipitation stops accumulating on the roadways, either from falling or drifting conditions. Data collection for this measure runs from November

through March of each winter season, and is updated in the January and April Tracker reports. The time in hours is the statewide average for the entire winter season.

### Improvement Status:

The average time, to date, to meet the performance objectives on the major highways is 1.0 hour more than the previous winter. The average time to meet the performance objectives on the minor highways is 1.4 hours more than last winter. The time to meet the performance objectives will vary based on the amount of snow received, the duration and the intensity of the storm. This winter has produced several major storms with near blizzard conditions requiring additional time to meet the objectives. Strategies to improve these numbers include implementing best practices, pursuing equipment enhancements, testing new materials and continued training of snow removal employees.







# SMOOTH AND UNRESTRICTED ROADS AND BRIDGES

*Tangible Result Driver – Kevin Keith, Chief Engineer*

MoDOT's customers have said they want smooth roads. Smoother roads mean less wear on vehicles, safer travel and greater opportunity for economic development. MoDOT will delight its customers by providing smooth and unrestricted roads and bridges. MoDOT recognizes that road projects built and maintained to a high standard of smoothness will be more efficient. MoDOT must provide customers with smooth roads – because everyone riding on a road can feel whether it is smooth or not!

### Projects that contribute to the Better Roads, Brighter Future program goal-2a

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Jay Bledsoe, Transportation System Analysis Engineer

#### Purpose of the Measure:

This measure tracks annually the miles of major highways in good condition compared to that required to reach the goal of 85 percent in good condition by the end of 2011 and the miles programmed in the Statewide Transportation Improvement Program (STIP) that contribute to this goal. In addition to the pavement goals, MoDOT has made improvements to the overall safety and appearance of these routes a priority. Therefore, in addition to pavement condition, this measure tracks miles of major highways that have a minimum 4-foot paved shoulder, an edge-line rumble stripe and a centerline rumble stripe where appropriate.

The Better Roads, Brighter Future (BRBF) program follows the 2005 completion of the Smooth Roads Initiative (SRI). BRBF will result in 85 percent of these major highways in good condition by the end of 2011.

#### Measurement and Data Collection:

The major highway system is defined as all routes functionally classified as principal arterials. By definition, the principal arterial system provides for statewide or interstate movement of traffic. Examples include the Interstate System and most U.S. routes such as 63, 54 or 36.

In urban areas, principal arterials carry traffic entering or leaving the urban area and serve movement of vehicles between central business districts and suburban residential areas. Examples include Business 50 (Missouri Blvd.) in Jefferson City, MO, 740 (Stadium Blvd.) in Columbia, and Route D (Page Ave.) in St. Louis.

The major roads in Missouri total approximately 5,573 centerline miles. This revised figure reflects additional mileage based on statewide review of the highway system. Good condition is defined using a

combination of criteria. On high-speed routes (speed limits greater than 50 mph), the International Roughness Index (IRI) is used. For lower-speed routes (mostly urban areas) where smoothness is less critical, a Present Serviceability Rating (PSR) is used. While smoothness is a factor in PSR, physical condition is also a factor.

The overall progress and programmed work will be reported annually. Semi-annual updates of miles opened to traffic will be reported.

#### Improvement Status:

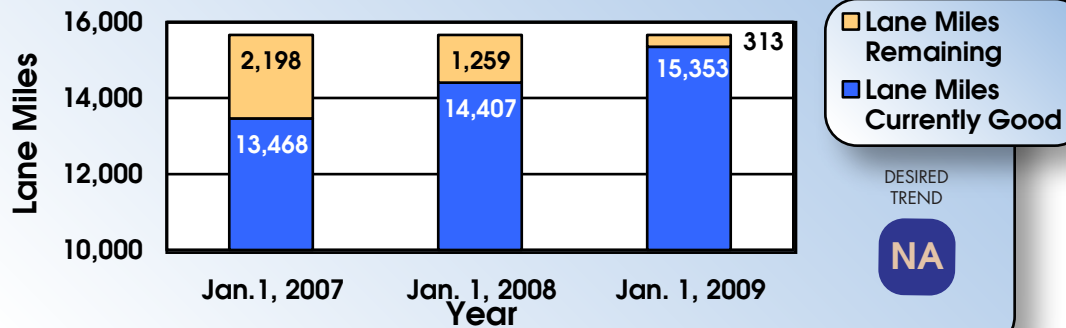
Completion of SRI resulted in a significant improvement in pavement condition. At the beginning of BRBF (January 2007), 74 percent of major highways were in good condition (as shown in 2b: Percent of major highways that are in good condition). By January 2009, more than 83 percent of major highways were in good condition.

Through the BRBF program, MoDOT will emphasize maintenance of the miles improved through SRI while making major improvements to the remainder of the 5,573 miles in the major highway system. By the end of 2011, a total of 85 percent of the major highways will have improved surfaces along with new or improved shoulders and rumble stripes. However, all 5,573 miles will benefit from safety features such as wider striping and brighter signing. There are currently more than 180 BRBF projects in the 2009-2013 STIP that will address more than 1,700 major highway miles.

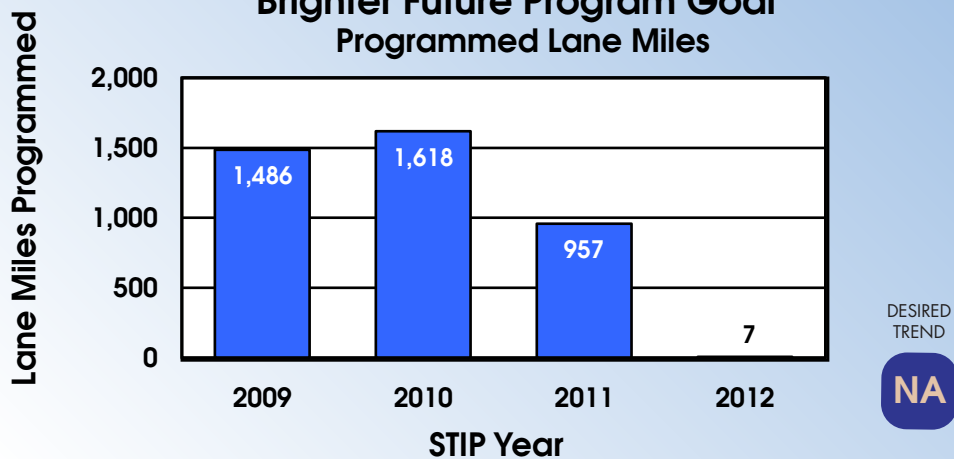
Funding for the BRBF program will come from existing Taking Care of System funds in accordance with the current funding allocation directed by the Missouri Highways and Transportation Commission. More than \$430 million per year is dedicated to taking care of the existing highway system.

## SMOOTH AND UNRESTRICTED ROADS AND BRIDGES

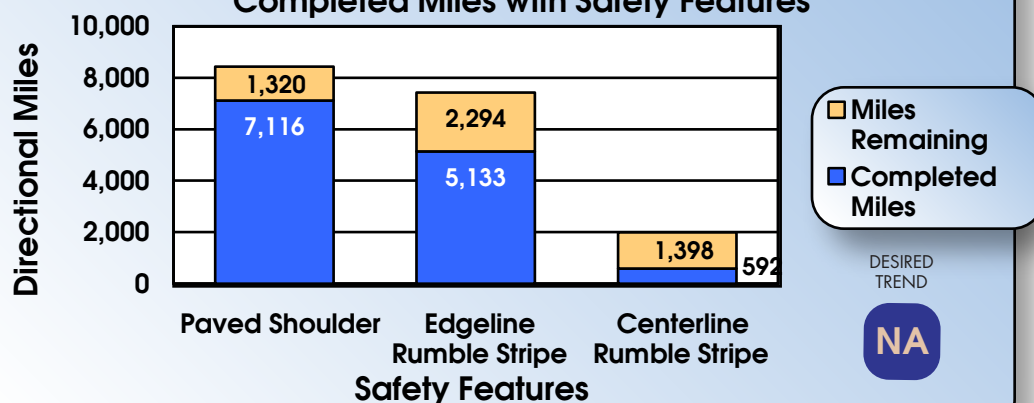
### Projects That Contribute to the Better Roads, Brighter Future Program Goal Lane Miles Meeting Desired Condition



### Projects That Contribute to the Better Roads, Brighter Future Program Goal Programmed Lane Miles



### Projects That Contribute to the Better Roads, Brighter Future Program Goal Completed Miles with Safety Features





### Percent of major highways that are in good condition-2b

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Jay Bledsoe, Transportation System Analysis Engineer

#### Purpose of the Measure:

This measure tracks the condition of Missouri's major highway road surfaces. The public has indicated the condition of Missouri's existing state roadway system should be one of the state's highest priorities. MoDOT places a high priority on improving the condition of state highways.

#### Measurement and Data Collection:

The major highway system is defined as all routes functionally classified as principal arterials. By definition, the principal arterial system provides for statewide or interstate movement of traffic. Examples include the Interstate System and most U.S. routes such as 63, 54 or 36.

In urban areas, principal arterials carry traffic entering or leaving the urban area and serve movement of vehicles between central business districts and suburban residential areas. Examples include Business 50 (Missouri Blvd.) in Jefferson City, MO, 740 (Stadium Blvd.) in Columbia, and Route D (Page Ave.) in St. Louis.

The major roads in Missouri total approximately 5,573 centerline miles. This figure reflects mileage based on statewide review of the highway system. Good condition is defined using a combination of criteria. On high-speed routes (speed limits greater than 50 mph), the International Roughness Index (IRI) is used. For lower-speed routes (mostly urban areas) where smoothness is less critical, a Present Serviceability Rating (PSR) is used. While smoothness is a factor in PSR, physical condition is also a factor.

Direct comparison to other states is difficult because of differences in measurement methodologies. However, a general order-of-magnitude comparison is possible given certain assumptions. For example, there are five states that report mileage for major highways within 10 percent of that maintained by MoDOT. Of these five, Georgia, with 5,875 miles, currently has the highest percentage of these highways classified in good condition based on smoothness only. The Missouri definition of good

uses smoothness as one factor; however, it also includes other condition factors such as physical distress to determine quality. While the comparison is not exact, it does indicate the level of performance possible on a system of Missouri's size.

This is an annual measure. Missouri data is updated in January to reflect prior calendar-year ratings.

#### Improvement Status:

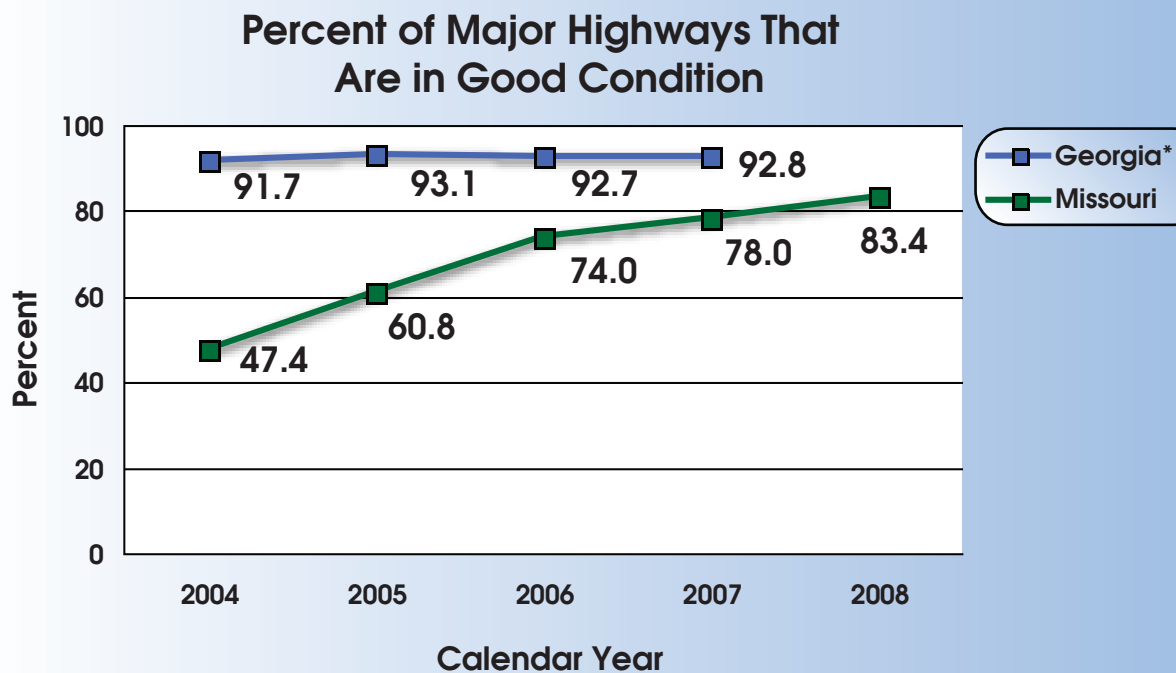
Progress continues toward improvement of the major highway system. Currently, more than 83 percent of these roadways are in good or better condition, a 37 percent improvement in the last four years. With the completion of the Better Roads, Brighter Future program in 2011, a total of 85 percent of the major highways will have improved surfaces along with new or improved shoulders and rumble stripes. However, all 5,573 miles will benefit from safety features such as wider striping and brighter signing. There are currently more than 180 BRBF projects in the 2009-2013 Statewide Transportation Improvement Program that will address more than 1,700 major highway miles.

Funding for BRBF will come from existing Taking Care of System funds in accordance with the current funding allocation directed by the Missouri Highways and Transportation Commission.

The Interstate System is the backbone of the major highway network. While it includes only about seven percent of the state highway mileage, it accounts for more than half the total state vehicles miles traveled. The increased emphasis on maintenance and operation of interstate highways that began in 2008 will continue into 2009. The Interstate Maintenance Plan sets specific goals, standards and responsibilities for the condition of these vital highways.

More than \$430 million per year is dedicated to taking care of the existing highway system. Of this total, \$125 million is reserved for work on the Interstate System and major bridges.

## SMOOTH AND UNRESTRICTED ROADS AND BRIDGES



\* Source data for Georgia is "Highway Statistics" published by FHWA. Data for 2007 not available at time of publication. Georgia data is based only on pavement smoothness (IRI) submitted as part of the Highway Performance Monitoring System.



### Percent of minor highways that are in good condition-2c

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Jay Bledsoe, Transportation System Analysis Engineer

#### Purpose of the Measure:

This measure tracks the condition of Missouri's minor highway road surfaces. The public has indicated the condition of Missouri's existing state roadway system should be one of the state's highest priorities. MoDOT places a high priority on improving the condition of highways in the state system.

#### Measurement and Data Collection:

The minor highway system consists of all routes functionally classified as minor arterials or collectors. These routes mainly serve local transportation needs and include highways commonly referred to as lettered routes, such as Route A, Route C and Route DD. The public sometimes refers to these routes as farm-to-market roads. The minor roads in Missouri total approximately 27,000 centerline miles.

Good condition is defined using a combination of criteria. Smoothness is evaluated using the International Roughness Index (IRI). Pavements below the prescribed threshold are considered good. However, public surveys have shown that physical condition is more important than ride on lower speed, lower volume roadways. Condition index, a measure of visual distress, is also evaluated and if those criteria are met, the roadway is considered good, regardless of the smoothness component.

Direct comparison to other states is difficult because of differences in measurement methodologies. However, a general order-of-magnitude comparison is possible given certain assumptions. For example, there are six states that report mileage for minor highways within 10 percent of that maintained by MoDOT. Of these six, Georgia, with 24,707 miles, currently has the highest percentage of these highways classified in good condition. The ratings reported by states as part of the Highway Performance Monitoring System for roads classified as minor more closely relate to Missouri's rating system.

Federal Highway Administration allows conditions on minor highways to be reported on either IRI or

Present Serviceability Index (PSI). PSI includes an assessment of physical distress similar to Missouri's definition. The Missouri definition of good uses smoothness as one factor. However, it also includes other condition factors such as physical distress to determine quality.

This is an annual measure. Missouri data is updated in January to reflect prior calendar-year ratings.

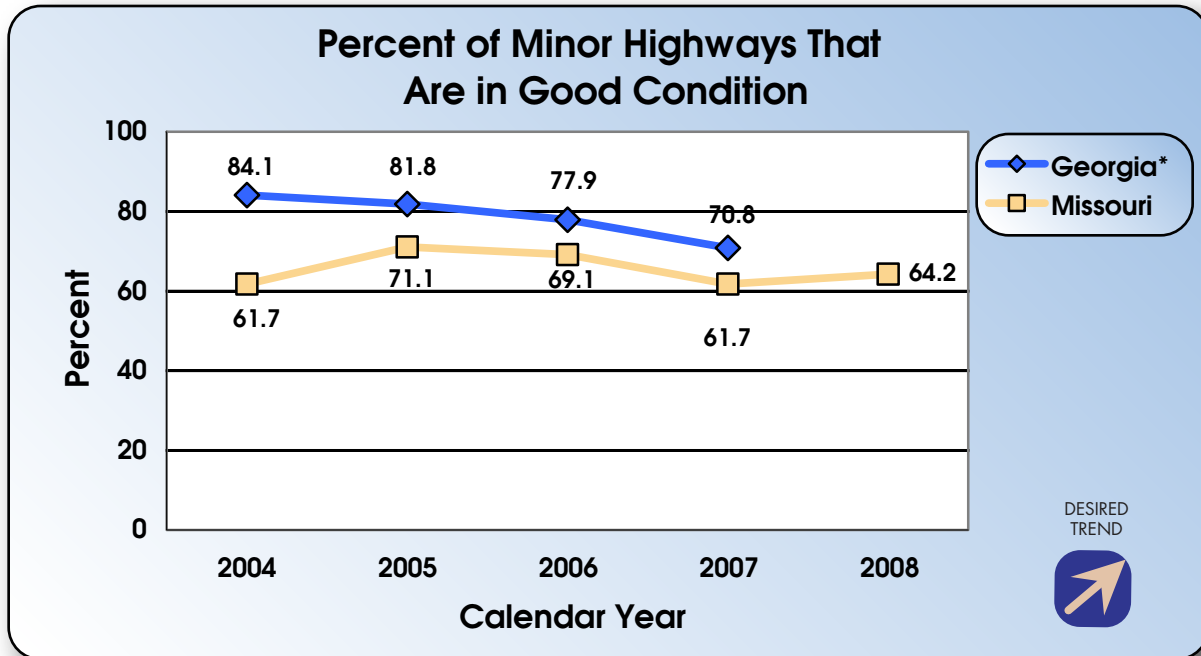
#### Improvement Status:

Through the Better Roads, Brighter Future program, MoDOT has identified the major highway system as a priority for the next five years. Efforts on the minor highways will emphasize maintenance of this system at or near the current levels. Work on minor highways will emphasize the use of MoDOT maintenance forces and will consist of treatments that include routine patching, crack sealing and chip seals.

The following graph shows a slight increase in minor highway conditions in 2008. This is a direct result of a change in the method of rating from previous years. Previously, the second component evaluated was Present Serviceability Rating (PSR), which also includes a smoothness component. Switching to condition index as discussed earlier provides the small increase shown. Had the change from PSR not been made, the 2008 percentage would have dropped to approximately 55.

MoDOT is positioned to react quickly to the federal economic stimulus package. Plans have been developed assuming \$60 million will be available for minor road improvements. These plans assume a mix of thin overlays and cold-in-place recycling to be done by contract. In addition, some funds will be used to upgrade select corridors with surface improvements, shoulders and other safety improvements. While the plan was developed using a specific funding amount, it can be easily scaled to take advantage of whatever amount is ultimately available.

## SMOOTH AND UNRESTRICTED ROADS AND BRIDGES



\* Source data for Georgia is "Highway Statistics" published by the Federal Highway Administration. Georgia data for 2008 was not available at time of publication. Data is based on a combination of pavement smoothness – IRI or PSR – as submitted as part of the Highway Performance Monitoring System.





### Percent of vehicle miles traveled on major highways in good condition-2d

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Jay Bledsoe, Transportation System Analysis Engineer

#### Purpose of the Measure:

This measure tracks the percent of vehicle miles traveled (VMT) on Missouri's major highway system that take place on highways in good condition. The public has indicated the condition of Missouri's existing state roadway system should be one of the state's highest priorities. Emphasizing work on the major highway system insures that the majority of travel takes place on highways in good condition.

#### Measurement and Data Collection:

The major highway system is defined as all routes functionally classified as principal arterials. By definition, the principal arterial system provides for statewide or interstate movement of traffic. Examples include the interstate system and most U.S. routes such as 63, 54 or 36.

In urban areas, principal arterials carry traffic entering or leaving the urban area and serve movement of vehicles between central business districts and suburban residential areas. Examples include Business 50 (Missouri Blvd.) in Jefferson City, MO, 740 (Stadium Blvd.) in Columbia, and Route D (Page Ave.) in St. Louis.

The major roads in Missouri total approximately 5,573 centerline miles. Good condition is defined using a combination of criteria. On high-speed routes (speed limits greater than 50 mph) the International Roughness Index (IRI) is used. For lower-speed routes (mostly urban areas) where smoothness is less critical, a Present Serviceability Rating (PSR) is used. While smoothness is a factor in PSR, physical condition is also a factor.

VMT is determined by multiplying the traffic volume on a given route by the route length. For this measure, the VMT is calculated on those routes in good condition and then divided by the total VMT for major routes to determine the percentage shown below. While the system of major highways in Missouri comprises only about 17 percent of the total

system mileage, it carries more than 75 percent of all traffic on the state highway system. This is an annual measure updated each January.

#### Improvement Status:

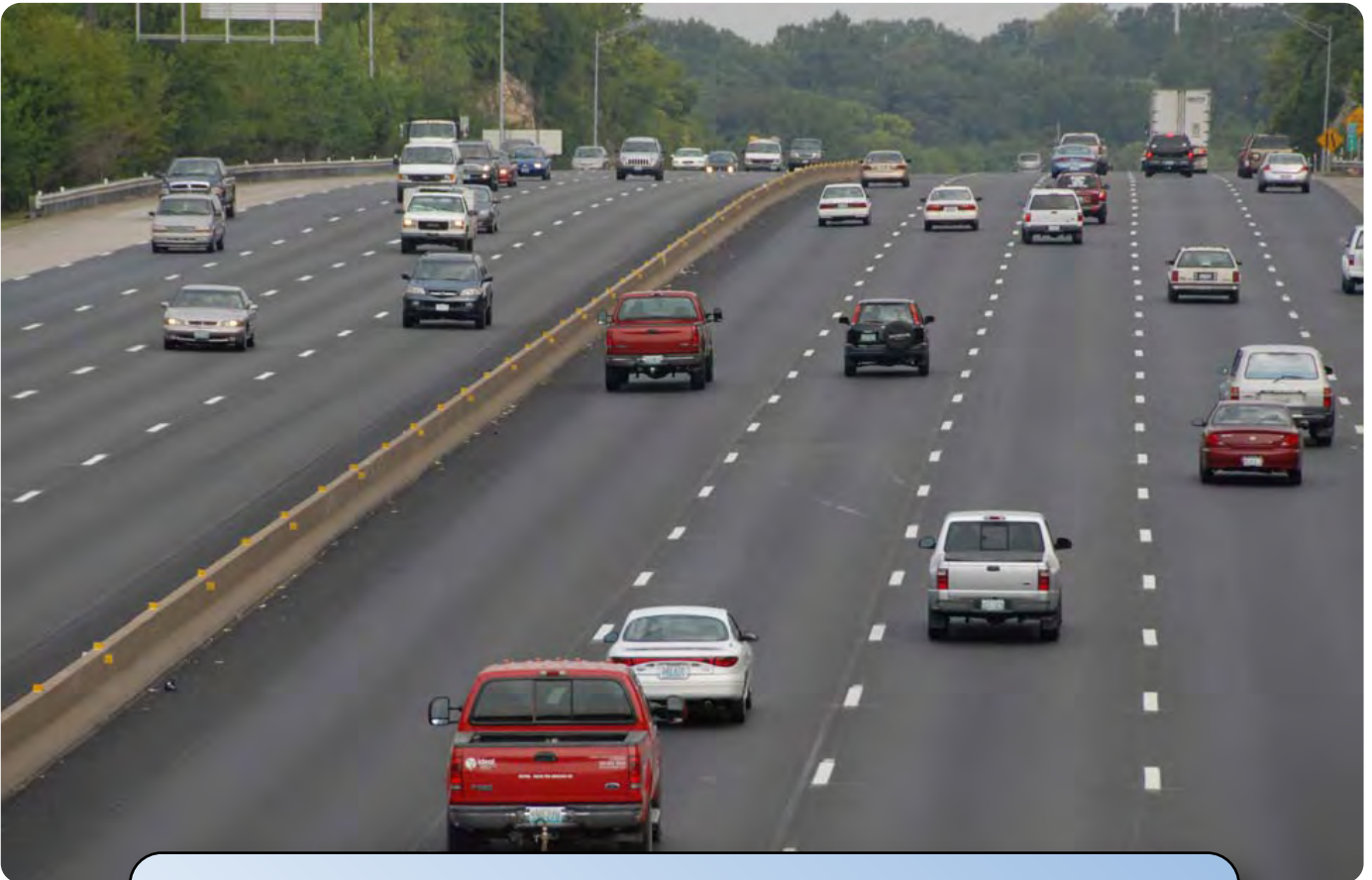
Progress continues toward improvement of the major highway system. Currently, more than 83 percent of these roadways are in good or better condition, a 37 percent improvement in the last four years. With the completion of the Better Roads, Brighter Future program in 2011, a total of 85 percent of the major highways will have improved surfaces along with new or improved shoulders and rumble stripes. However, all 5,573 miles will benefit from safety features such as wider striping and brighter signing. There are currently more than 180 BRBF projects in the 2009-2013 Statewide Transportation Improvement Program that will address more than 1,700 major highway miles.

Funding for BRBF will come from existing Taking Care of System (TCOS) funds in accordance with the current funding allocation directed by the Missouri Highways and Transportation Commission.

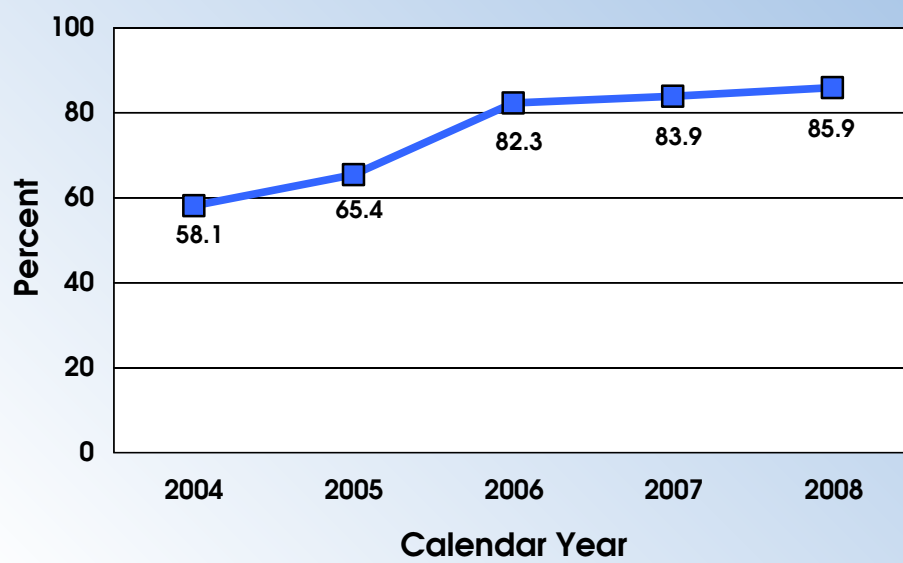
The Interstate System is the backbone of the major highway network. While it includes only about seven percent of the state highway mileage, it accounts for more than half the total state vehicles miles traveled. The increased emphasis on maintenance and operation of interstate highways that began in 2008 will continue into 2009. The Interstate Maintenance Plan sets specific goals, standards and responsibilities for the condition of these vital highways.

More than \$430 million per year is dedicated to taking care of the existing highway system. Funding for the Better Roads, Brighter Future program will come from existing TCOS funds in accordance with the current funding allocation directed by the Missouri Highways and Transportation Commission.

## SMOOTH AND UNRESTRICTED ROADS AND BRIDGES



**Percent of Vehicle Miles Traveled  
on Major Highways in Good Condition**



### Percent of deficient bridges on major highways-2e

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Dennis Heckman, State Bridge Engineer

#### Purpose of the Measure:

This measure tracks progress toward improving the condition of Missouri's bridges on major highways. The public has indicated the condition of Missouri's existing roadway system should be one of the state's highest priorities. MoDOT places a high priority on increasing the quality of bridges on the state system.

#### Measurement and Data Collection:

The major highway system is defined as all routes functionally classified as principal arterials. By definition, the principal arterial system provides for statewide or interstate movement of traffic. Examples include the Interstate System or most U.S. routes such as 63, 54 or 36.

In urban areas, principal arterials carry traffic entering or leaving the urban area and serve movement of vehicles between central business districts and suburban residential areas. Examples include Business 50 (Missouri Blvd.) in Jefferson City, MO, 740 (Stadium Blvd.) in Columbia, and Route D (Page Ave.) in St. Louis.

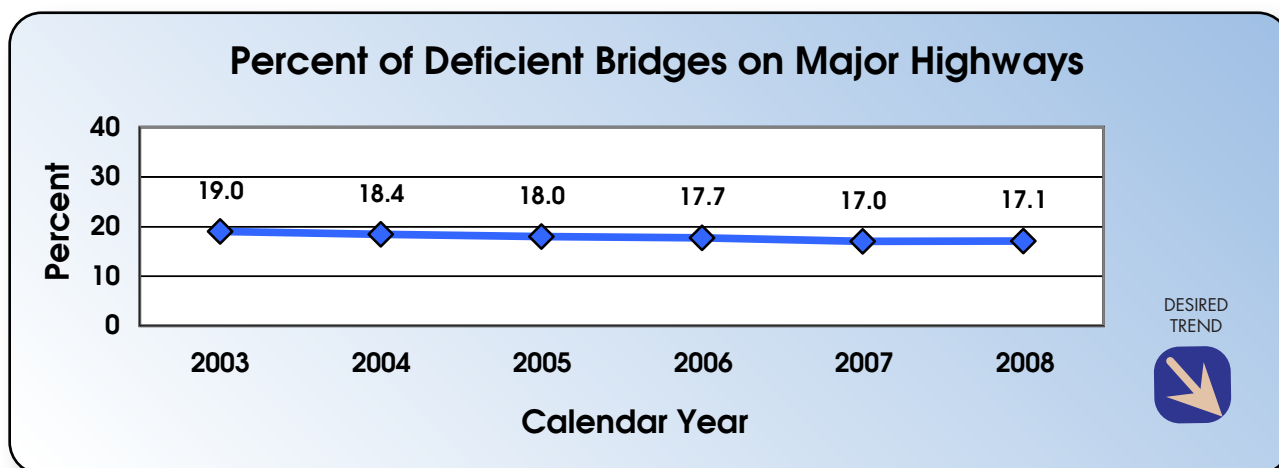
A bridge is considered deficient if it is either structurally deficient (SD) or functionally obsolete (FO) as defined using Federal Highway

Administration criteria. A SD bridge is in poor condition or has insufficient load capacity when compared to modern design standards. A FO bridge has poor roadway alignment or has clearance or width restrictions that no longer meet the usual criteria for the system it serves. MoDOT staff inspect all state-owned bridges. There are currently 3,351 bridges on major highways. This is an annual measure and data is updated each April based on the prior year's inspections.

#### Improvement Status:

Bridge conditions on major highways have taken a small step backward. While the percentage of deficient bridges has been reduced from 19.0 percent to 17.1 percent over the last six years, this percentage actually increased slightly from 2007 to 2008.

The Safe & Sound Bridge Improvement Program will address more than 800 of the state's most critical structures. This program will repair or replace these bridges over the next five years. While most of these bridges are located on the minor highway system, a small benefit to bridges on major highways is also anticipated (0.5 percent drop in this measure).



## Percent of deficient bridges on minor highways-2f

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Dennis Heckman, State Bridge Engineer

### Purpose of the Measure:

This measure tracks progress toward improving the condition of Missouri's minor highway bridges. The public has indicated the condition of Missouri's existing roadway system should be one of the state's highest priorities. MoDOT places a high priority on increasing the quality of bridges on the state system.

### Measurement and Data Collection:

The minor highway system consists of all routes functionally classified as minor arterials or collectors. These routes serve more local transportation needs and include highways commonly referred to as lettered routes, such as Route A, Route C and Route DD. The public sometimes refers to these routes as farm-to-market roads.

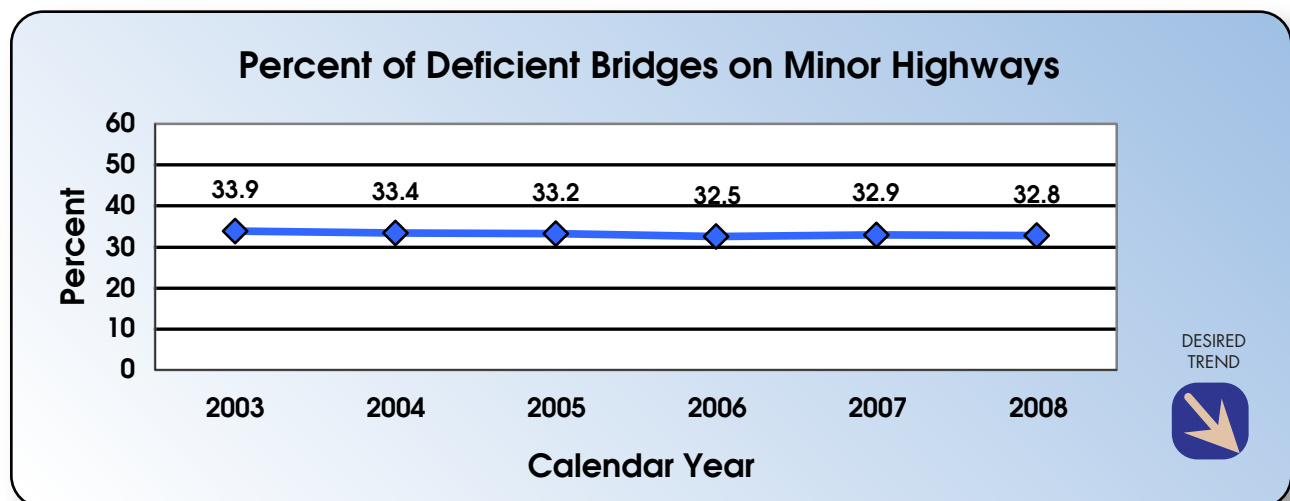
A bridge is considered deficient if it is either structurally deficient (SD) or functionally obsolete (FO) as defined using Federal Highway Administration criteria. A SD bridge is in poor condition or has insufficient load capacity when compared to modern design standards. A FO bridge has poor roadway alignment or has clearance or width restrictions that no longer meet the usual criteria for the system it serves. MoDOT staff

inspects all state-owned bridges. There are currently 6,898 bridges on minor highways. This is an annual measure and data is updated each April based on the prior year's inspections.

### Improvement Status:

Bridge conditions on minor highways have shown a slight improvement from 2007 to 2008. The percentage of deficient bridges has been reduced from 33.9 percent to 32.8 percent over the last six years.

The strategy to improve this measure is the Safe & Sound Bridge Improvement Program. This program will repair or replace over 800 bridges over the next five years. Most of these bridges are located on the minor highway system. A decrease in the number of deficient bridges is expected to occur with the completion of this program. However, due to the accelerating rate of bridges becoming deficient, there still will be a sizable number of deficient bridges on the system. It is projected that this measure will drop to 30.0 percent at Safe & Sound's completion.





## Number of deficient bridges on the state system (major and minor highways) -2g

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Dennis Heckman, State Bridge Engineer

### Purpose of the Measure:

This measure tracks progress toward improving the condition of Missouri's bridges. The public has indicated the condition of Missouri's existing roadway system should be one of the state's highest priorities. MoDOT places a high priority on increasing the quality of bridges on the state system.

### Measurement and Data Collection:

A bridge is considered deficient if it is either structurally deficient (SD) or functionally obsolete (FO) as defined using Federal Highway Administration criteria. A SD bridge is in poor condition or has insufficient load capacity when compared to modern design standards. A FO bridge has poor roadway alignment or has clearance or width restrictions that no longer meet the usual criteria for the system it serves. MoDOT staff inspect all state-owned bridges. There are currently a total of 10,249 bridges on the state highway system.

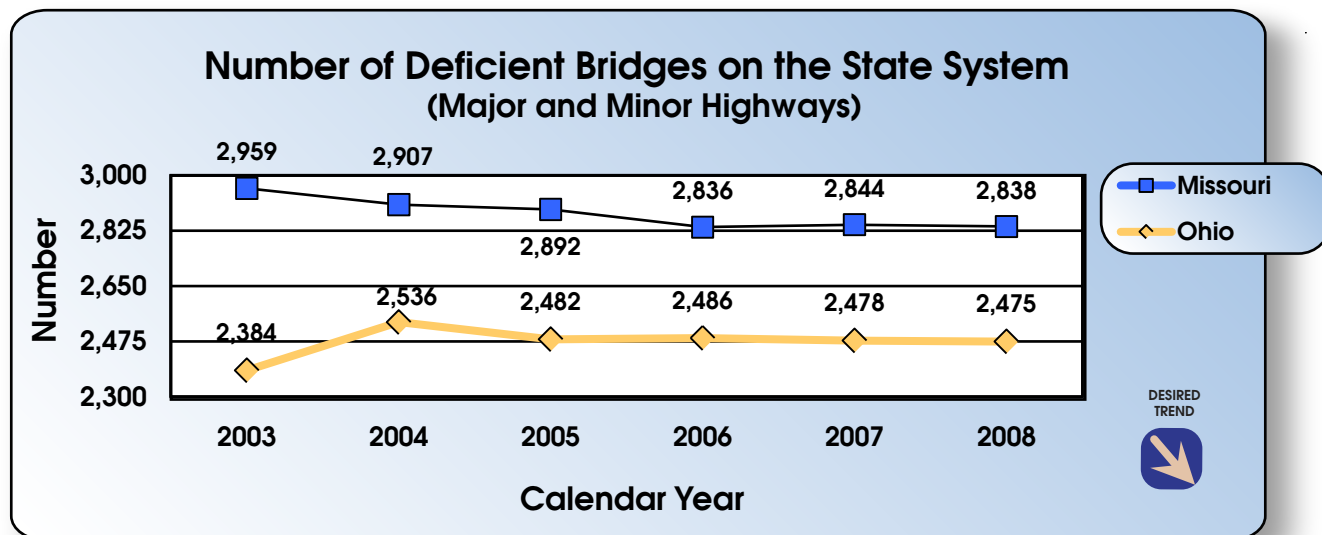
This is an annual measure and data is taken from FHWA's National Bridge Inventory. Missouri data is available in April of each calendar year and is

updated in the April Tracker. The data for other states is not published until the following year.

### Improvement Status:

Bridge conditions on Missouri highways have taken a small step forward. While the number of deficient bridges on the state system has seen a steady reduction from 2,959 to 2,838 over the last six years, this number has been fairly stable from 2006 thru 2008. Of the 2,838 deficient bridges, 1,121 are functionally obsolete and 1,717 are structurally deficient.

The strategy to improve this measure is the Safe & Sound Bridge Improvement Program that will repair or replace more than 800 of the state's most critical structures in five years. A decrease in the number of deficient bridges is expected with the completion of this program. However, due to the accelerating rate of bridges becoming deficient, there will still be a sizable number of deficient bridges on the system. It is projected that this measure will drop to 2,500 at the completion of the Safe & Sound Bridge Improvement Program.



\* Source for Ohio, "Better Bridges" November 2009, for data collected in calendar year 2008.

*(This page is intentionally left blank for duplexing purposes)*



# SAFE TRANSPORTATION SYSTEM

*Tangible Result Driver – Don Hillis, Director of System Management*

MoDOT works closely with other safety advocates to make our roads and work zones safer. The department supports educational programs that encourage safe driving practices and enforcement efforts that increase adherence to traffic laws. MoDOT will not compromise safety because it believes in the well-being of its employees and customers.



## Number of fatalities and disabling injuries-3a

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Leanna Depue, Highway Safety Director

### Purpose of the Measure:

This measure tracks annual trends in fatal and disabling injuries resulting from traffic crashes on all Missouri roadways. This data drives the development and focus of the Missouri Highway Safety Plan. This plan is required annually by the National Highway Traffic Safety Administration and outlines key strategies to reduce these losses. In addition, this data supports Missouri's Blueprint to Arrive Alive. This document identifies the statewide initiatives with a goal of reducing fatalities to 850 or fewer by 2012.

### Measurement and Data Collection:

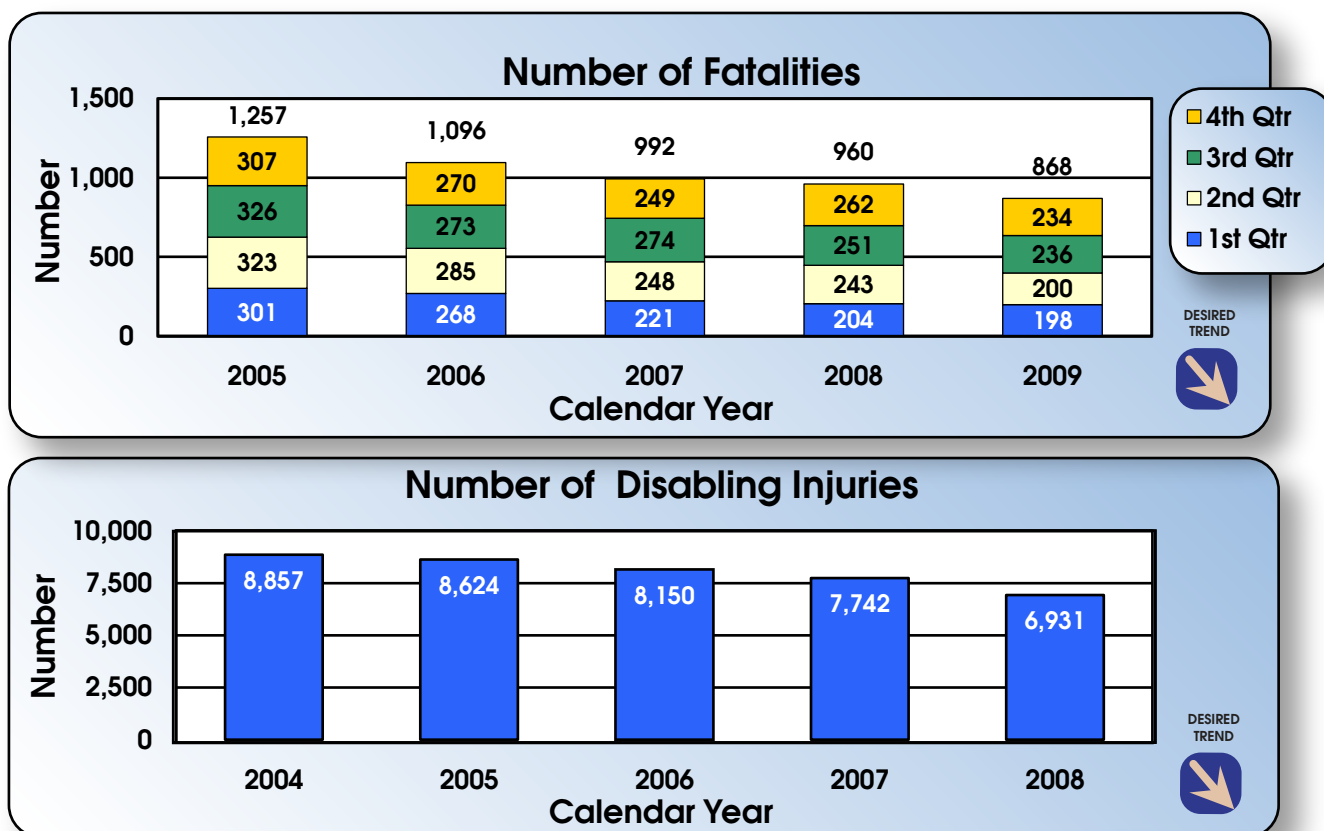
Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT's traffic management system. Crash data reports are available to law enforcement and traffic safety advocates for crash analysis through both databases. Final data is collected on an annual basis and is updated in July of the following year.

**Note:** The 2009 quarterly fatalities are not final numbers.

### Improvement Status:

Fatalities decreased 24 percent from 2005 to 2008 in a continued downward trend. Until 2007, Missouri had not been under 1,000 fatalities since 1993. The 960 fatalities in 2008 means the Missouri Coalition for Roadway Safety can again celebrate accomplishing their goal of 1,000 or fewer fatalities by 2008. The 2009 fatality total of 868 is not final; however, another significant decrease is anticipated.

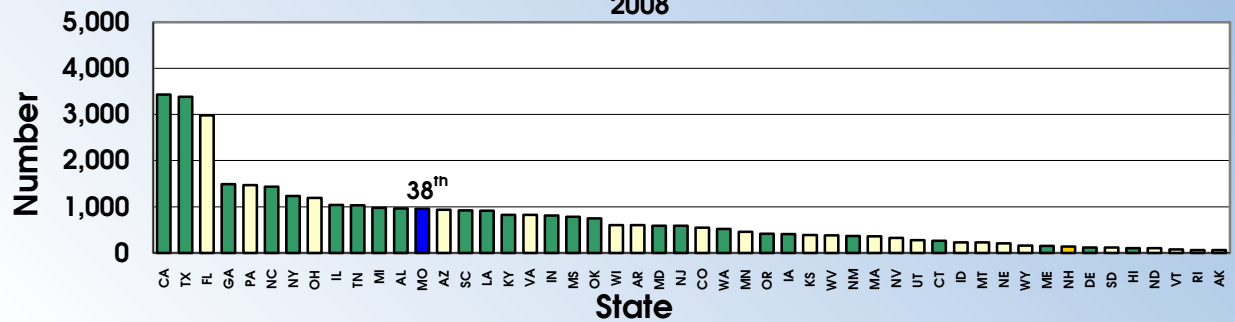
Disabling injuries continue to show a decreasing trend with a reduction of over 1,200 when compared to the 2006 number. In spite of the decrease in fatalities, the national data comparison shows that Missouri moved from 35<sup>th</sup> in 2007 to 38<sup>th</sup> in 2008 for total fatalities. Fatalities and disabling injuries are decreasing due in part to engineering enhancements such as roadway shoulders, three-strand guard cable, rumble strips, and enhanced delineation. Also contributing are strong safety belt and impaired driving public information campaigns combined with increased law enforcement participation in statewide campaigns.



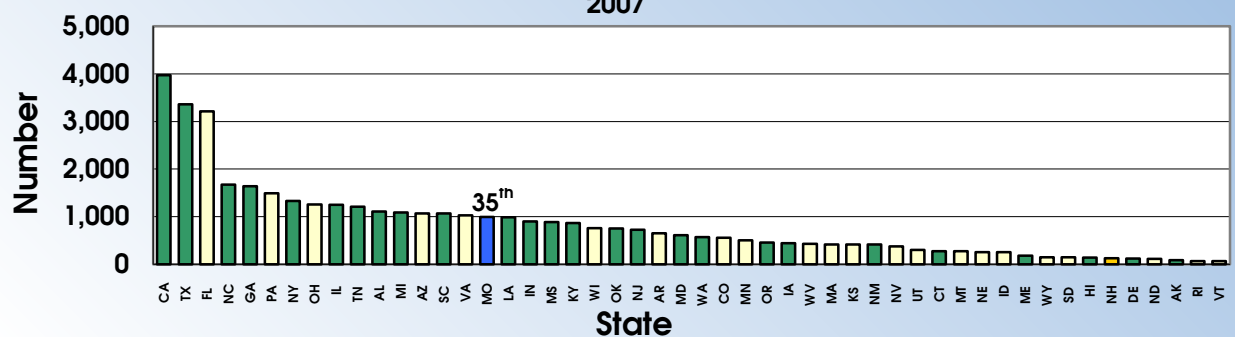
For all graphs on this page, the following legend applies:

- States that have primary seat belt laws
- States that have secondary seat belt laws
- States that have neither a primary nor a secondary seat belt law (1 total)
- Missouri – secondary seat belt law in place (Source: [www.ghsa.org](http://www.ghsa.org), July 2008)

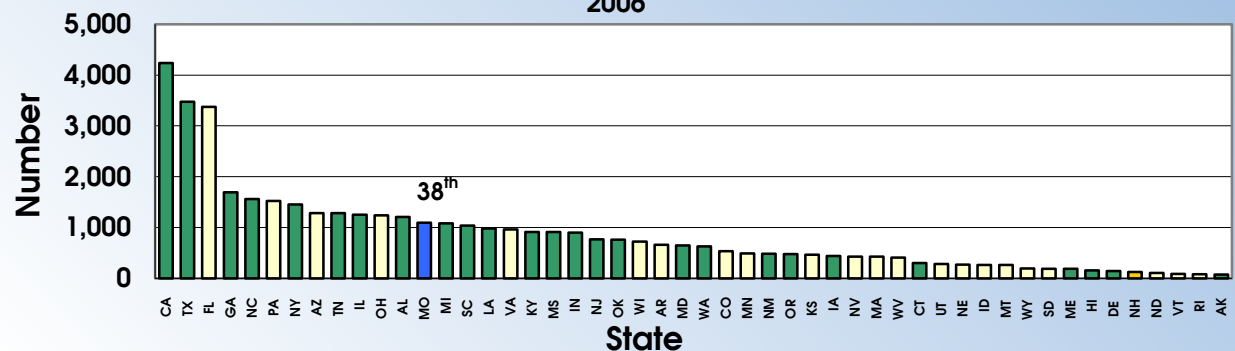
**Missouri's National Ranking by Total Number of Fatalities**  
2008



**Missouri's National Ranking by Total Number of Fatalities**  
2007



**Missouri's National Ranking by Total Number of Fatalities**  
2006



## Number of impaired driver-related fatalities and disabling injuries-3b

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Leanna Depue, Highway Safety Director

### Purpose of the Measure:

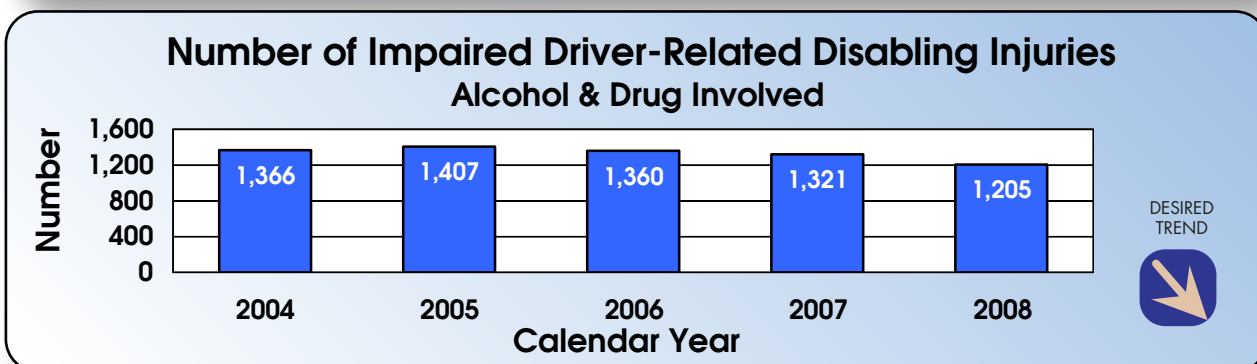
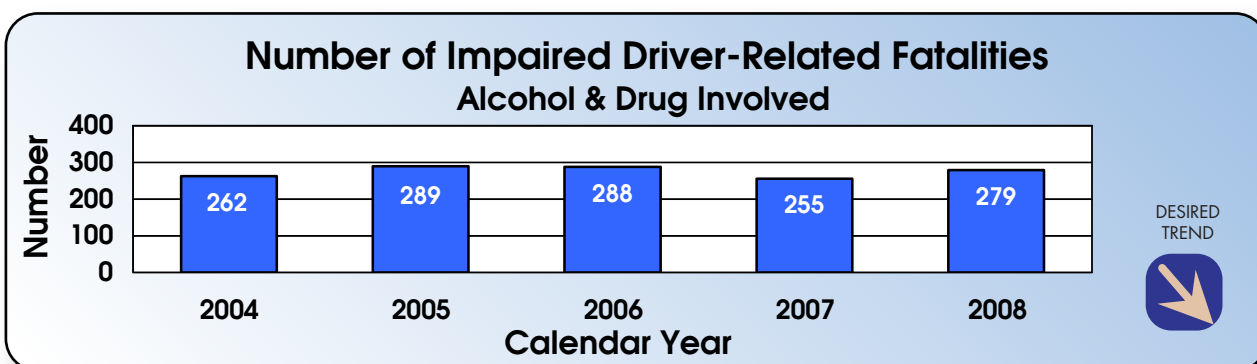
This measure tracks annual trends in fatalities and injuries resulting from traffic crashes on all Missouri roadways involving drivers who are impaired by alcohol and/or drugs. This data drives the development and focus of the Missouri Highway Safety Plan. This plan is required annually by the National Highway Traffic Safety Administration and outlines key strategies to reduce these losses. In addition, this data supports Missouri's Blueprint to Arrive Alive. This document identifies the statewide initiatives with a goal of reducing fatalities to 850 or fewer by 2012.

### Measurement and Data Collection:

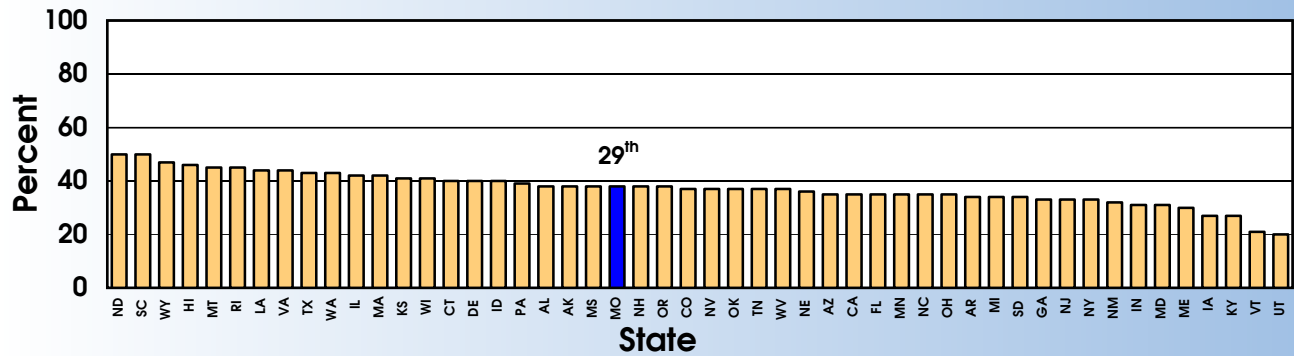
Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT's traffic management system. Crash data reports are available to law enforcement and traffic safety advocates for crash analysis through both databases. Final data is collected on an annual basis and is updated in July of the following year.

### Improvement Status:

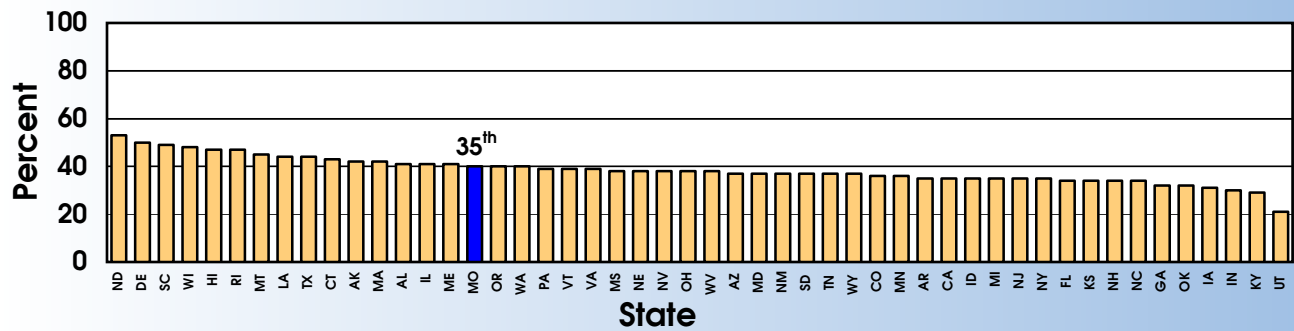
Alcohol- and drug-related fatalities increased by nine percent in 2008 after a three-year decrease. Disabling injuries continue to decrease in 2008. In the national comparison, Missouri moved from 35<sup>th</sup> in 2007 to 29<sup>th</sup> in 2008. So in spite of the increase in fatalities, Missouri rose in the national rankings in alcohol-related crashes by six spots. In addition to Missouri participating in the national "You Drink and Drive, You Lose" campaign, the Missouri Law Enforcement Traffic Safety Advisory Council selected specific days to increase law enforcement activity through December 2009. Public information and education has been directed at high-risk drivers ages 21 to 35. Law enforcement efforts have been concentrated on high-crash corridors, increasing the number of sobriety checkpoints and increasing DWI units in selected locations. These efforts are designed to reduce impaired driving crashes overall and move the fatalities in a downward trend. An increasing number of people who work in liquor establishments are completing the online server training modules that were first developed in 2005.



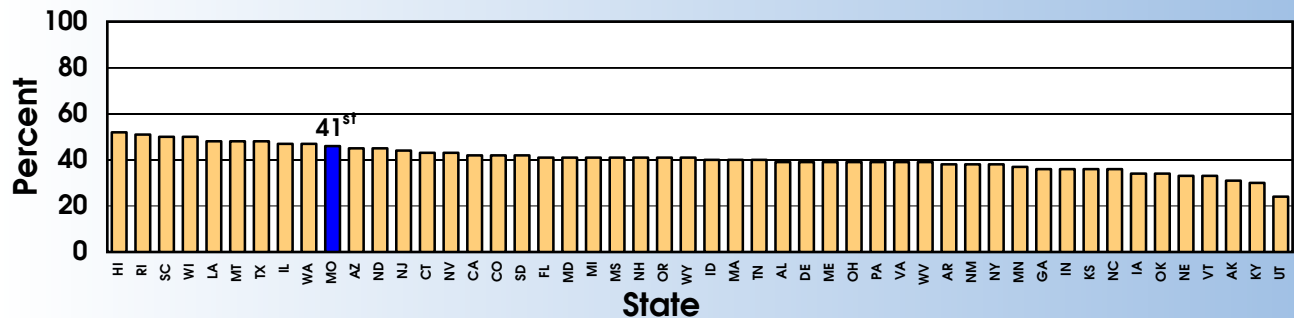
### Missouri's National Ranking by Percent Killed in Alcohol-Related Crashes 2008



### Missouri's National Ranking by Percent Killed in Alcohol-Related Crashes 2007



### Missouri's National Ranking by Percent Killed in Alcohol-Related Crashes 2006





## Rate of annual fatalities and disabling injuries-3c

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Leanna Depue, Highway Safety Director

### Purpose of the Measure:

This measure tracks annual trends in fatal and disabling injury rates per 100 million vehicle miles traveled (HMVM) in Missouri. This data drives the development and focus of the Missouri Highway Safety Plan. This plan is required annually by the National Highway Traffic Safety Administration and outlines key strategies to reduce these losses. In addition, this data supports Missouri's Blueprint to Arrive Alive. This document identifies the statewide initiatives with a goal of reducing fatalities to 850 or fewer by 2012.

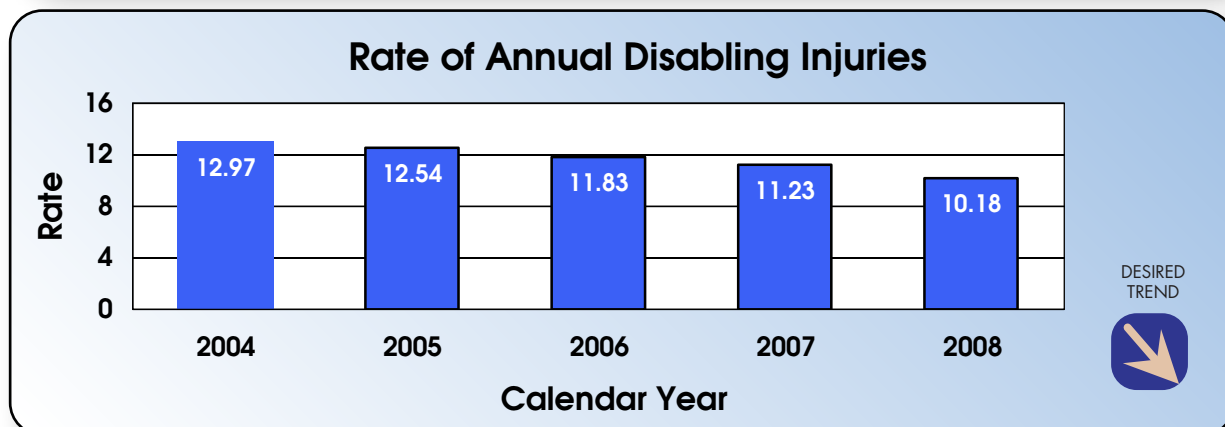
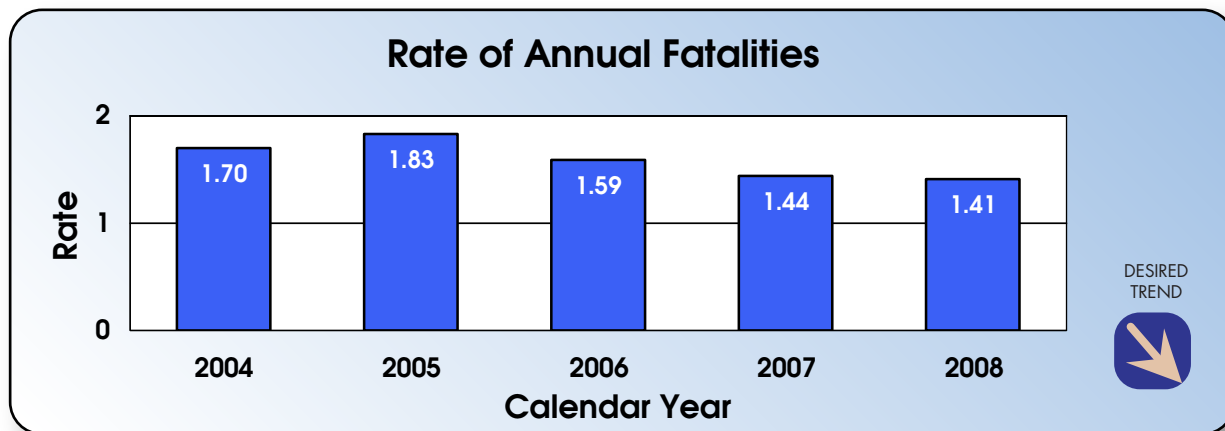
### Measurement and Data Collection:

Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT's traffic management system. Crash data reports are available to law enforcement

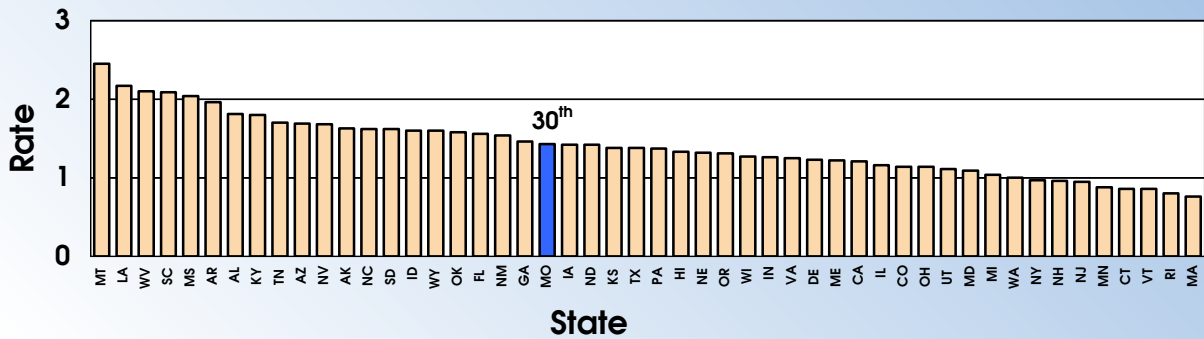
and traffic safety advocates for crash analysis through both databases. Data is collected on an annual basis and is updated in July of the following year.

### Improvement Status:

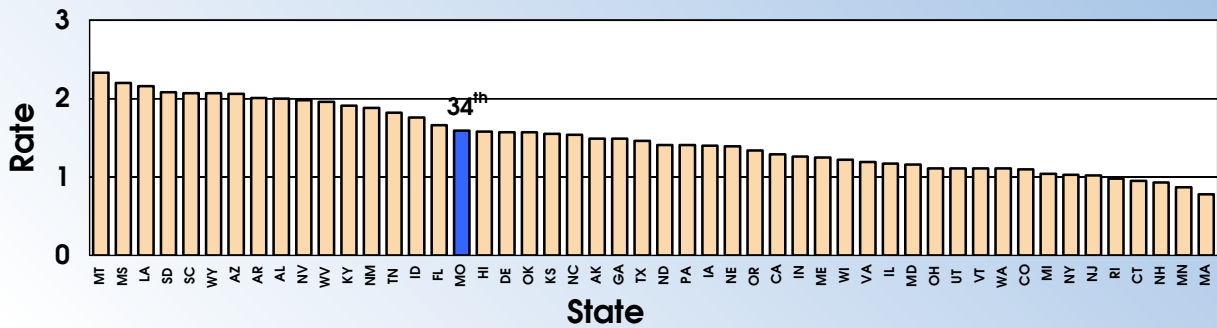
Both the fatality and disabling injury rates in Missouri are at the lowest ever recorded. Missouri has seen a 23 percent decrease since 2005. Based on the national comparison, Missouri has moved from 34<sup>th</sup> in 2006 to 30<sup>th</sup> in 2007. The 2008 national comparison is not yet available. Based on the NHTSA national goal of a 1.0 fatality rate, Missouri is still moving in the right direction. Focused law enforcement efforts, engineering safety enhancements and increased public awareness all contribute to the decrease.



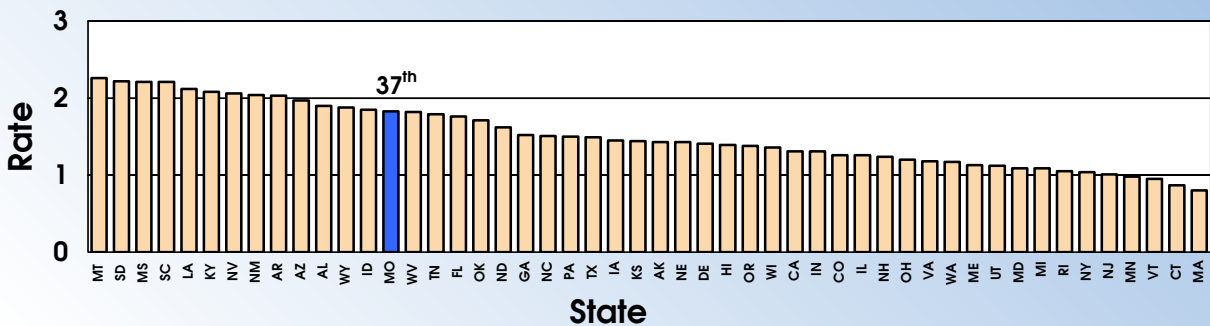
### Missouri's National Ranking in State Fatality Rates 2007



### Missouri's National Ranking in State Fatality Rates 2006



### Missouri's National Ranking in State Fatality Rates 2005



## Percent of safety belt/passenger vehicle restraint use-3d

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Leanna Depue, Highway Safety Director

### Purpose of the Measure:

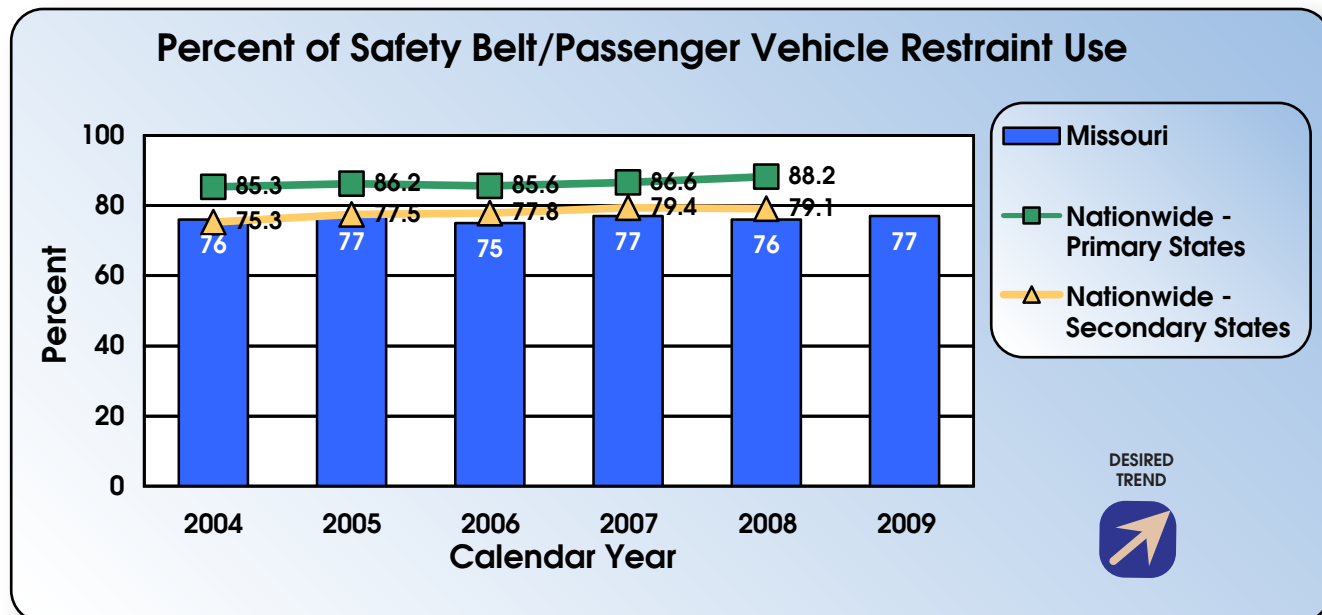
This measure tracks annual trends in safety belt usage by persons in passenger vehicles. This data drives the development and focus of the Missouri Highway Safety Plan. This plan is required annually by the National Highway Traffic Safety Administration and outlines key strategies to reduce these losses. In addition, this data supports Missouri's Blueprint to Arrive Alive. This document identifies the statewide initiatives with a goal of reducing fatalities to 850 or fewer by 2012.

### Measurement and Data Collection:

Each June, a statewide survey is conducted at 460 pre-selected locations in 20 counties. The data collected at these sites is calculated into a safety belt usage rate by using a formula approved by the National Highway Traffic Safety Administration. The safety belt usage survey enables data collection from locations representative of 85 percent of the state's population. The data collection plan is the same each year for consistency and compliance with the National Highway Traffic Safety Administration guidelines. Data is collected on an annual basis and is updated in August of the following year. Annual information for the national rankings may not be available from all 50 states.

### Improvement Status:

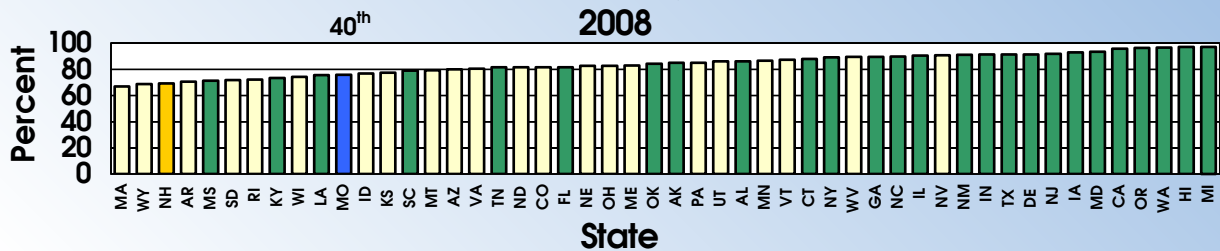
Safety belt use in Missouri has remained fairly constant for the past five years between 75-77 percent. In the 2008 national comparison, Missouri ranked 40<sup>th</sup> in safety belt usage slipping one spot from 39<sup>th</sup> in 2007. The national average for safety belt use for 2008 is 84 percent. Missouri currently has a secondary safety belt law, which means law enforcement may not stop a vehicle solely to determine safety belt compliance. Law enforcement must observe another driving violation to stop a vehicle and issue a safety belt citation. Many states have a primary safety belt law, which means law enforcement may stop a vehicle if they observe an occupant is not wearing a safety belt. Missouri continues to focus efforts through public information and education and law enforcement participation in the national "Click It or Ticket" campaign. The Law Enforcement Traffic Safety Advisory Council (LETSAC) recently added additional quarterly enforcement dates through December 2009 to focus on safety belt use. Battle of the Belts and Get Your Buckle On are focused on increasing seat belt use among teenagers. Promoting the passage of local primary safety belt ordinances is another strategy to increase safety belt use. MoDOT continues to promote the need for a primary safety belt law in Missouri.



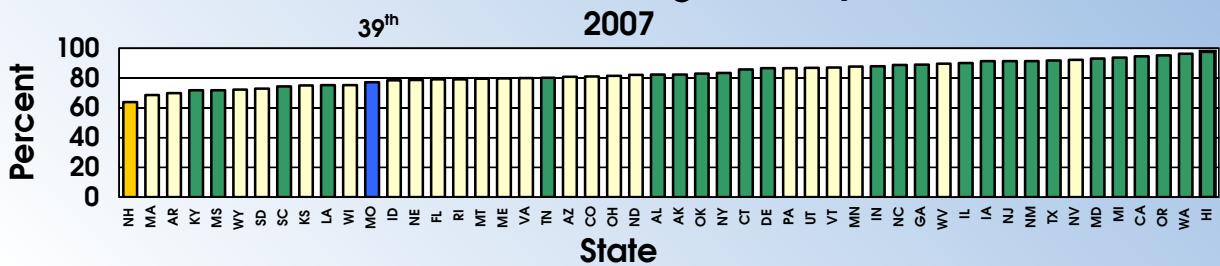
For all graphs on this page, the following legend applies:

- States that have primary seat belt laws
- States that have secondary seat belt laws
- States that have neither a primary nor a secondary seat belt law (1 total)
- Missouri – secondary seat belt law in place (Source: <http://www.ghsa.gov/>, June 2008)

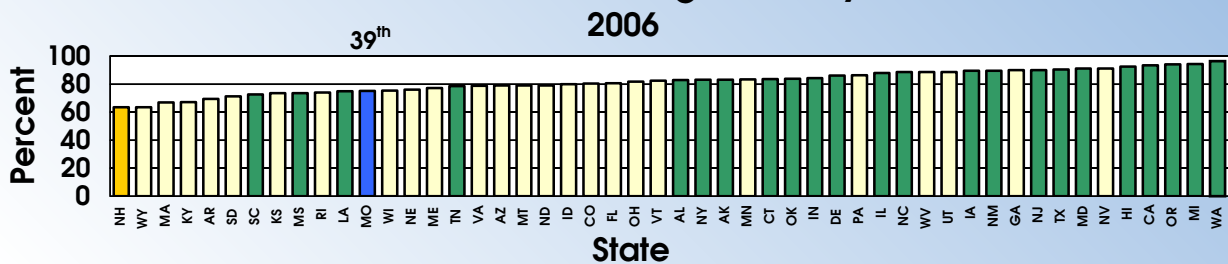
### Missouri's National Ranking in Safety Belt Use



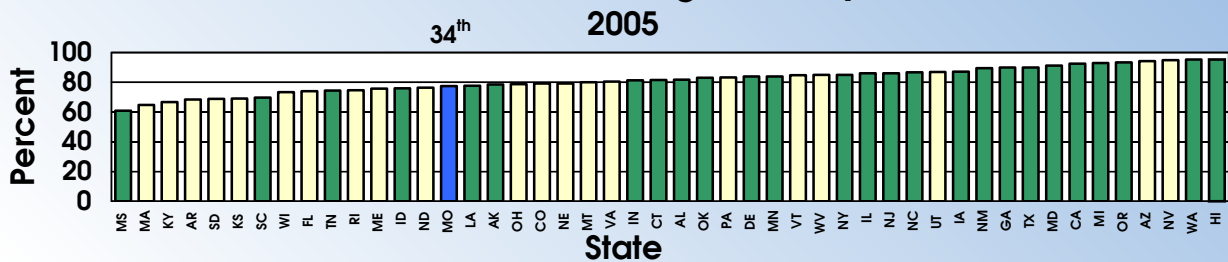
### Missouri's National Ranking in Safety Belt Use



### Missouri's National Ranking in Safety Belt Use



### Missouri's National Ranking in Safety Belt Use





### Number of bicycle and pedestrian fatalities and disabling injuries-3e

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Leanna Depue, Highway Safety Director

#### Purpose of the Measure:

This measure tracks annual trends in fatalities and disabling injuries resulting from traffic crashes with bicycles and pedestrians on Missouri roadways. This data drives the development and focus of the Missouri Highway Safety Plan. This plan is required annually by the National Highway Traffic Safety Administration and outlines key strategies to reduce these losses. In addition, this data supports Missouri's Blueprint to Arrive Alive. This document identifies the statewide initiatives with a goal of reducing fatalities to 850 or fewer by 2012.

#### Measurement and Data Collection:

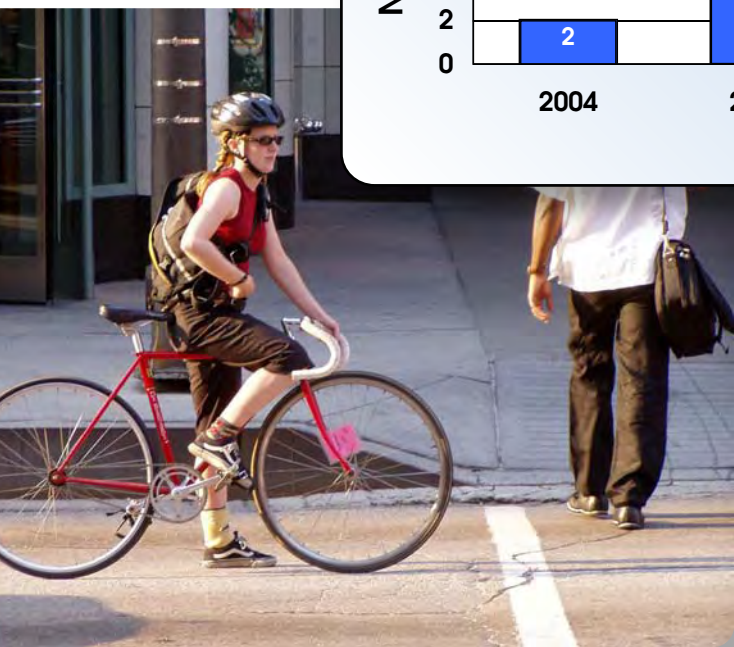
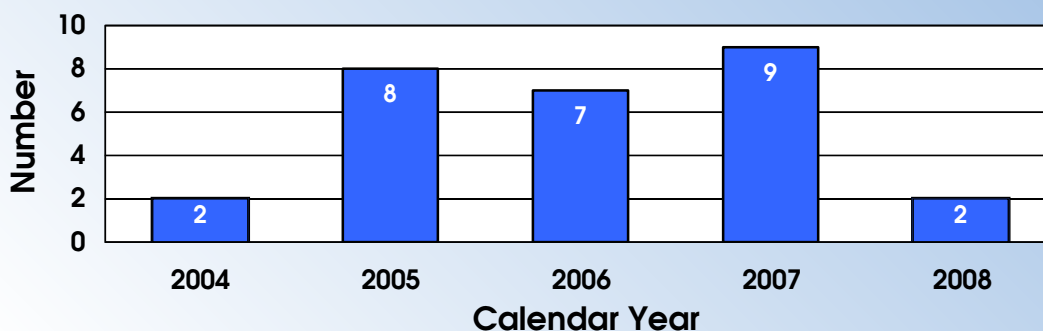
Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT's traffic management system.

Crash data reports are available to law enforcement and traffic safety advocates for crash analysis through both databases. Final data is collected on an annual basis and updated in July of the following year.

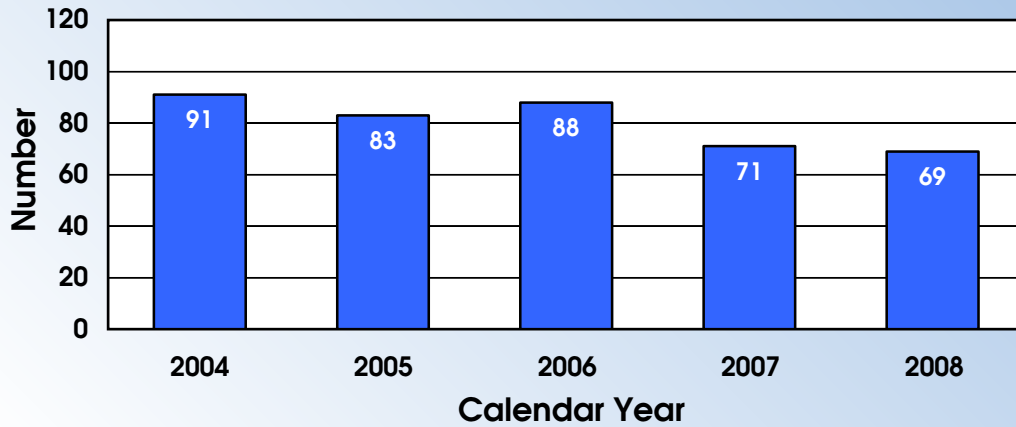
#### Improvement Status:

This data reflects the number of fatalities and disabling injuries occurring when a motor vehicle is involved in a crash with a bicycle or pedestrian. Between 2005-2007, bicycle fatalities remained steady. In 2008, we had a reduction in fatalities although MoDOT has been increasing the miles of dedicated bike lanes. Pedestrian fatalities and disabling injuries show a slight decrease over the past five years due to signaling and dedicated crossing area improvements. Funds have been dedicated to support the Bicycle Pedestrian Advisory Committee.

#### Number of Bicycle Fatalities



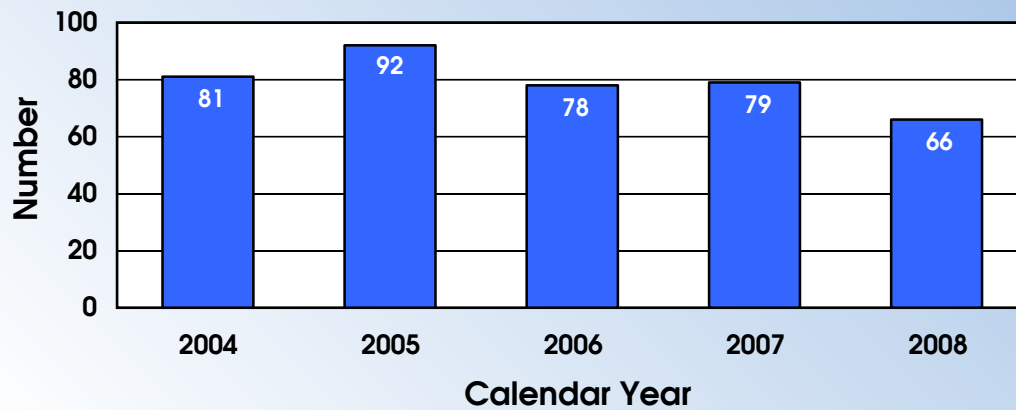
**Number of Bicycle Disabling Injuries**



DESIRED  
TREND



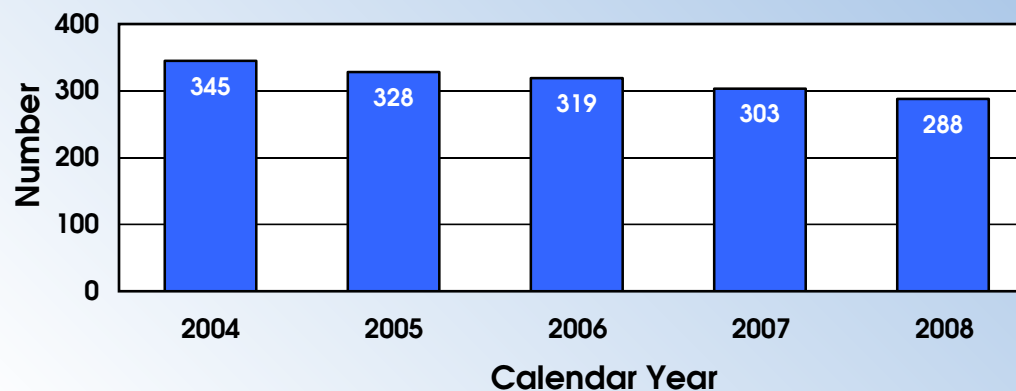
**Number of Pedestrian Fatalities**



DESIRED  
TREND



**Number of Pedestrian Disabling Injuries**



DESIRED  
TREND



### Number of motorcycle fatalities and disabling injuries-3f

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Leanna Depue, Highway Safety Director

#### Purpose of the Measure:

This measure tracks annual trends in fatalities and disabling injuries of motorcyclists on all Missouri roadways. This data drives the development and focus of the Missouri Highway Safety Plan. This plan is required annually by the National Highway Traffic Safety Administration and outlines key strategies to reduce these losses. In addition, this data supports the Missouri's Blueprint to Arrive Alive. This document identifies the statewide initiatives with a goal of reducing fatalities to 850 or fewer by 2012.

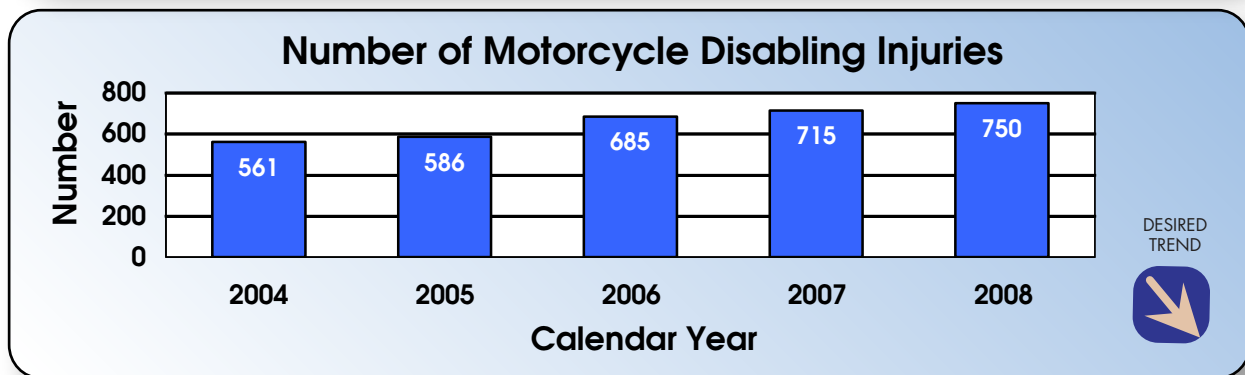
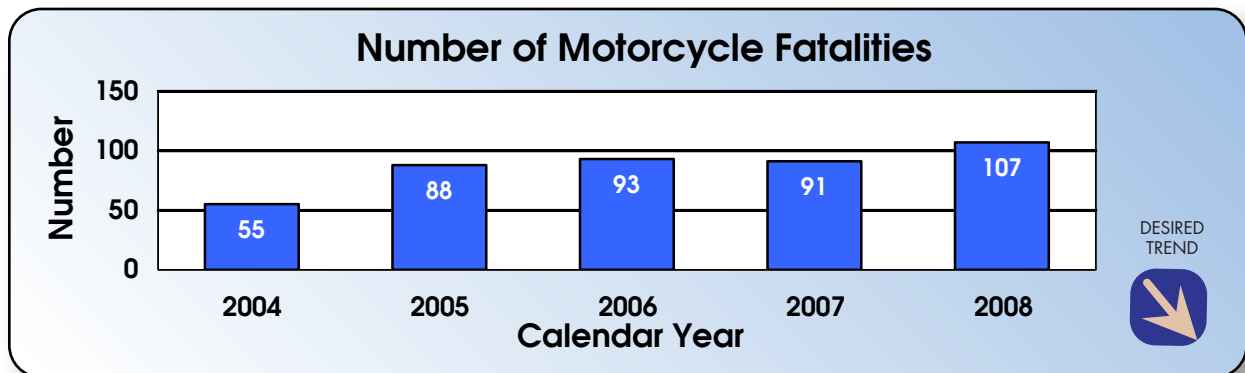
#### Measurement and Data Collection:

Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT's traffic management system. Crash data reports are available to law enforcement and traffic safety advocates for crash analysis through

both databases. Final data is collected on an annual basis and updated in July of the following year.

#### Improvement Status:

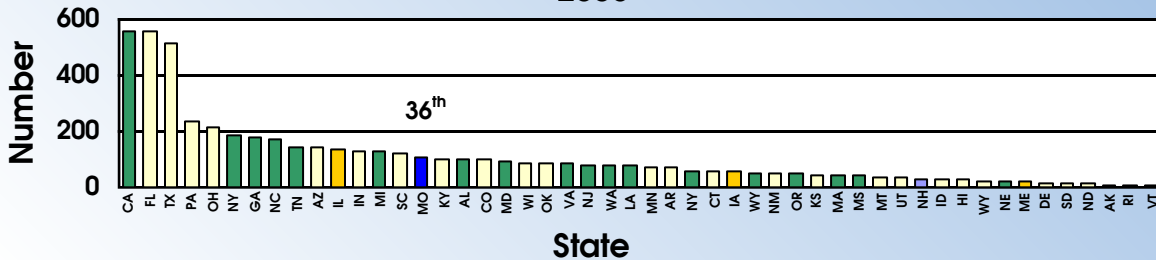
Motorcycle fatalities and disabling injuries have shown an upward trend over the past five years. In 2008, Missouri had the highest number of motorcycle fatalities on record with 107. The national data comparison shows Missouri moved from 32<sup>nd</sup> in 2007 to 36<sup>th</sup> in 2008. Longer riding seasons and an increase in the number of licensed motorcycles and riders has increased the exposure rate in recent years. Rider education classes are offered within one hour's driving time throughout Missouri. More than 5,000 riders at 28 sites are trained each year. In 2006, a Motorcycle Safety Task Force was organized and charged with developing a strategic plan. The task force has completed the plan and continues to move forward with implementation.



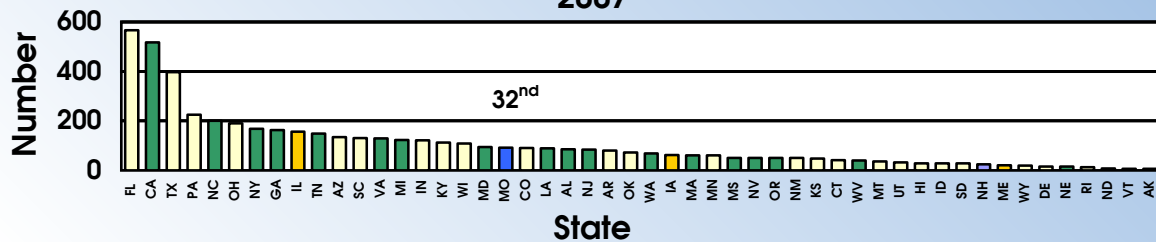
For all graphs on this page, the following legend applies:

- States that have all rider helmet laws
- States that require use for a specific segment of riders (usually under age 18)
- States that do not require helmet use (3 total)
- Missouri – motorcycle helmet law in place (Source: [www.nhtsa.gov](http://www.nhtsa.gov), January 2008)

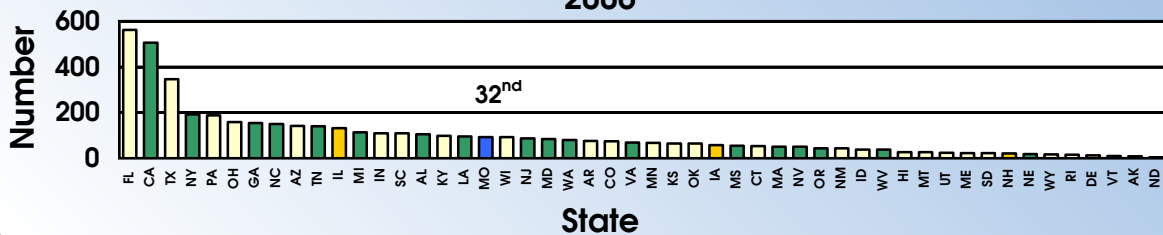
**Missouri's National Ranking in Motorcycle Fatalities**  
2008



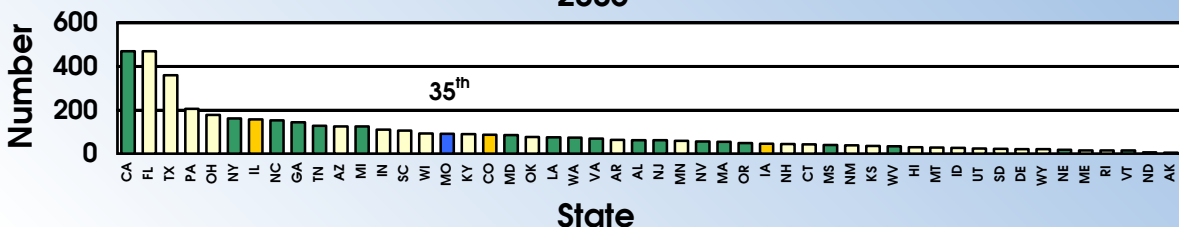
**Missouri's National Ranking in Motorcycle Fatalities**  
2007



**Missouri's National Ranking in Motorcycle Fatalities**  
2006



**Missouri's National Ranking in Motorcycle Fatalities**  
2005





## Number of commercial motor vehicle crashes resulting in fatalities -3g

**Result Driver:** Don Hillis, Director of Systems Management

**Measurement Driver:** Mark Biesemeyer, Motor Carrier Services Program Manager

### Purpose of the Measure:

This measure tracks the number of commercial motor vehicles involved in fatal crashes each year. MoDOT uses the information to target educational and enforcement efforts.

### Measurement and Data Collection:

The Missouri State Highway Patrol collects and records the crash statistics used in this measure. The data used in this measure reports the number of commercial motor vehicles involved in a crash where one or more people die within 30 days as a result of the crash. This is an annual measure, updated each July for the previous year.

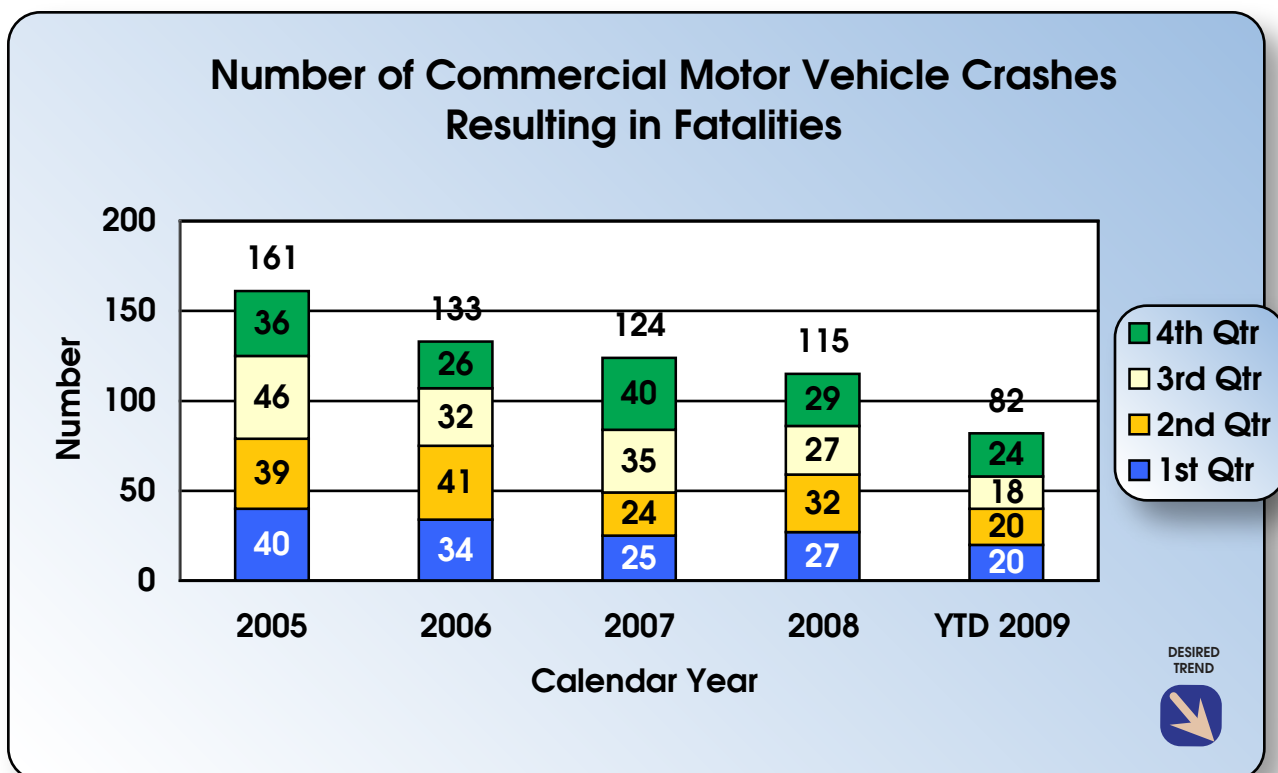
### Improvement Status:

The preliminary number of fatal crashes reported for 2009 is 82. This is 33 fewer than reported at this point in 2008, a reduction of 28.7 percent in one year.

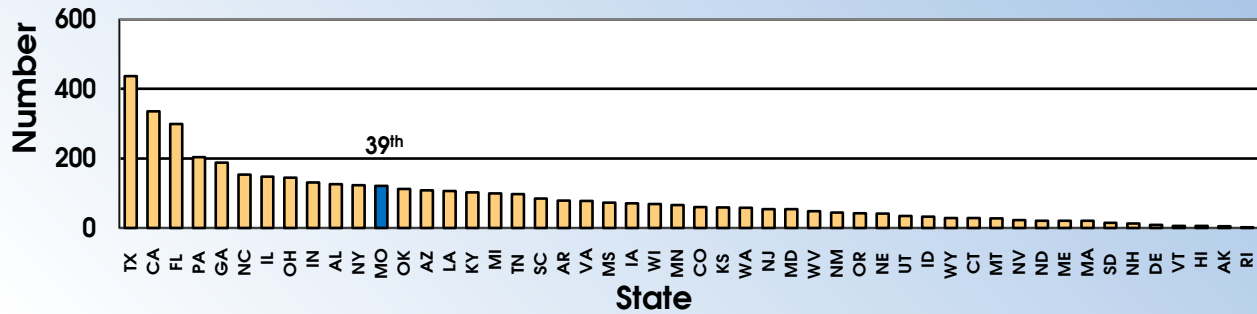
Between 2005 and 2008, the number of Missouri commercial motor vehicle fatal crashes dropped from 161 to 115, a 28.6 percent decrease.

MoDOT coordinates its efforts to reduce fatal crashes with the Missouri State Highway Patrol, the Federal Motor Carrier Safety Administration Missouri Division and the Kansas City and St. Louis police departments. MoDOT efforts include the installation of larger highway signs, highly reflective pavement markings, cable guardrails, roundabout intersections, incident management alert signs, roadside rumble strips, and intelligent transportation systems at scales. MoDOT conducts carrier safety training, regulation compliance reviews, safety audits of new motor carrier firms and truck inspections at terminals and destinations. The MSHP, St. Louis and Kansas City Police Departments conduct commercial vehicle roadside inspections in order to remove unsafe drivers and vehicles from the road.

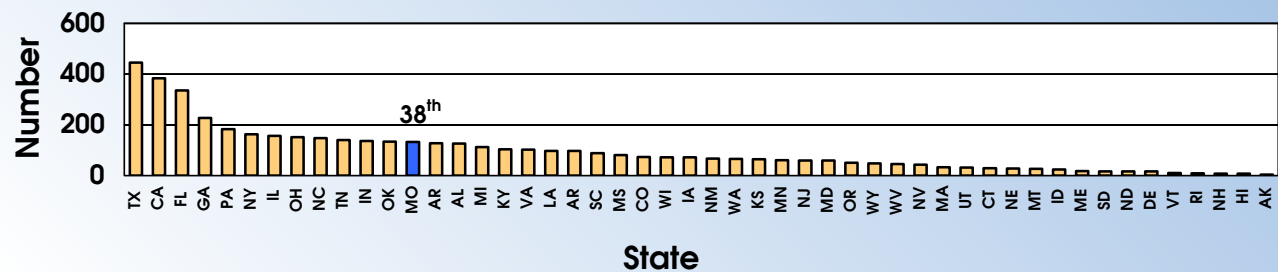
National numbers for 2008 are now final. Missouri ranked 39<sup>th</sup> in the number of fatality crashes nationwide in 2008.



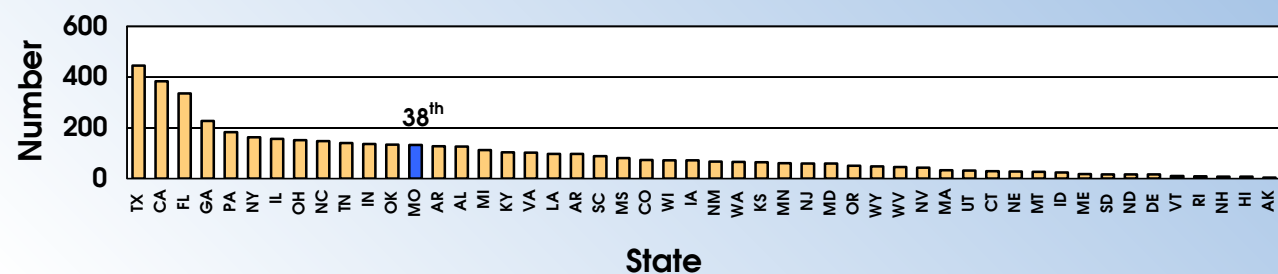
### Missouri's National Ranking in Number of Fatal Commercial Vehicle Crashes 2008



### Missouri's National Ranking in Number of Fatal Commercial Vehicle Crashes 2007



### Missouri's National Ranking in Number of Fatal Commercial Vehicle Crashes 2006



## Number of commercial motor vehicle crashes resulting in injuries -3h

**Result Driver:** Don Hillis, Director of Systems Management

**Measurement Driver:** Mark Biesemeyer, Motor Carrier Services Program Manager

### Purpose of the Measure:

This measure tracks number of commercial motor vehicles involved in injury crashes each year. MoDOT uses the information to target educational and enforcement efforts.

### Measurement and Data Collection:

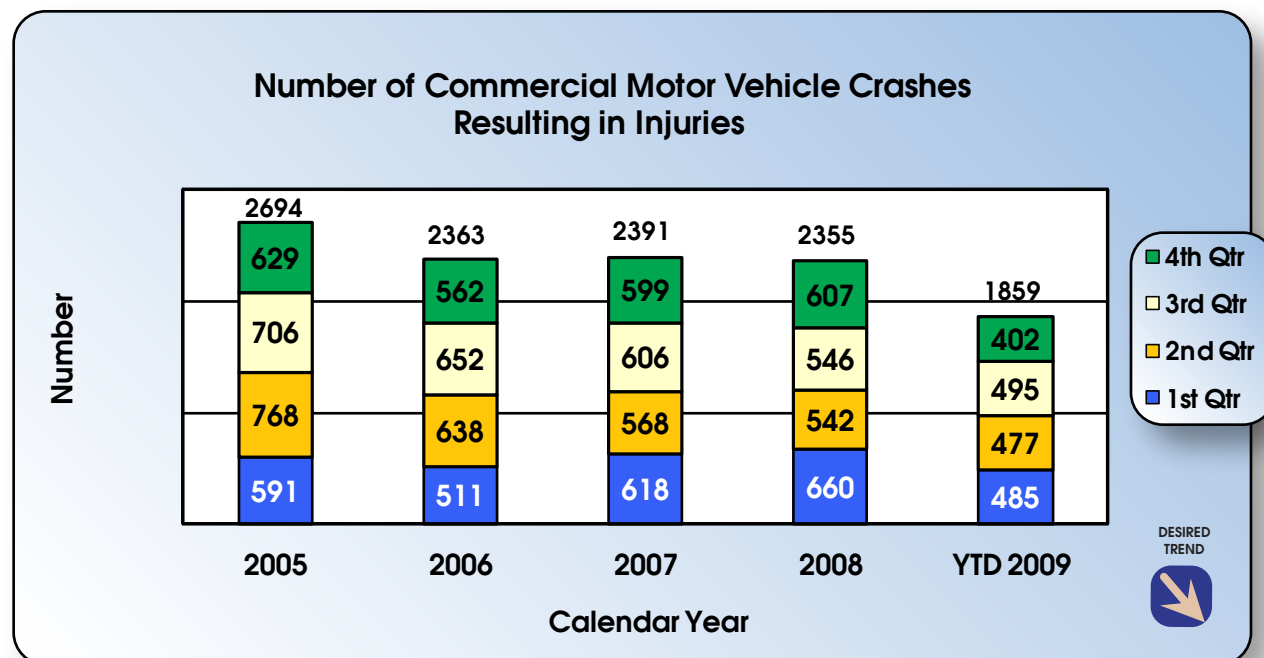
The Missouri State Highway Patrol collects and records crash statistics. The data for this measure reflects the number of commercial motor vehicles involved in crashes where one or more people are injured. This is an annual measure and will be updated each July for the previous year.

### Improvement Status:

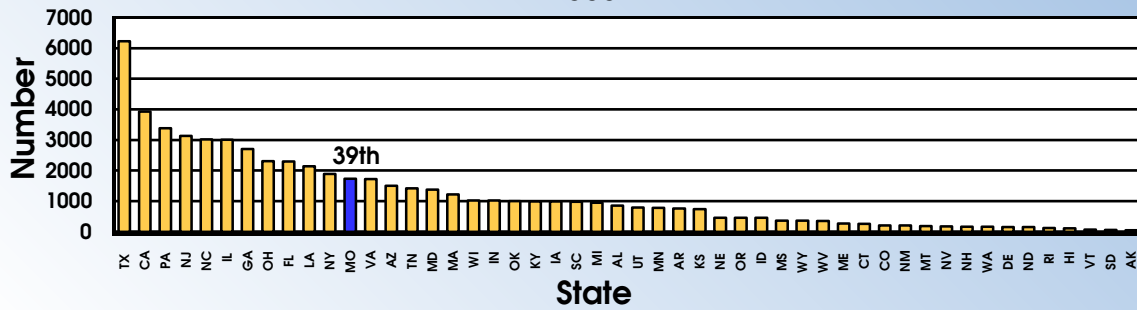
The preliminary number of injury crashes reported for 2009 is 1859. This is 496 fewer than reported at this point in 2008, a 21.1 percent reduction in one year. Between 2005 and 2008, the number of commercial motor vehicle crashes resulting in injuries dropped from 2,694 to 2,355, a decrease of 12.6 percent.

The overall downward trend is due to the coordinated safety efforts of MoDOT, the Missouri State Highway Patrol, the Federal Motor Carrier Safety Administration Missouri Division, and the Kansas City and St. Louis police departments. MoDOT efforts include the installation of larger highway signs, highly reflective pavement markings, cable guardrails, roundabout intersections, incident management alert signs, rumble stripes, and intelligent transportation systems at scales. MoDOT conducts carrier safety training, regulation compliance reviews, safety audits of new motor carrier firms and truck inspections at terminals and destinations. The MSHP, St. Louis and Kansas City police departments conduct commercial vehicle roadside inspections in order to remove unsafe drivers and vehicles from the road.

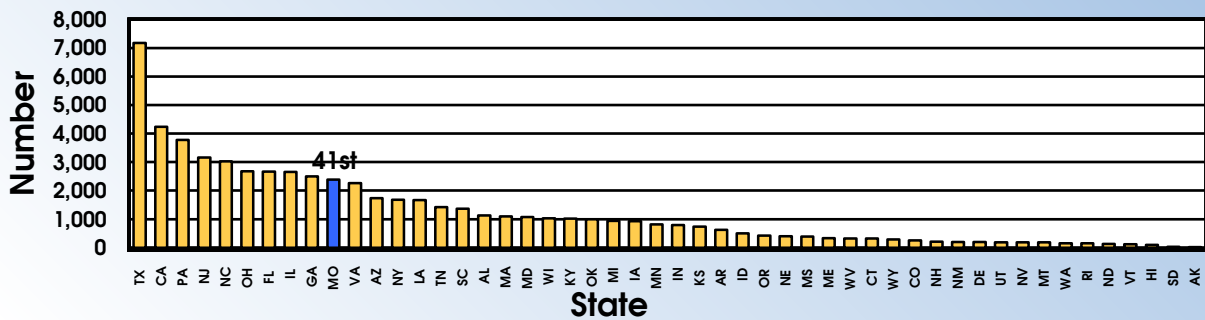
National numbers for 2008 are now final. Missouri ranked 39th in the number of injury crashes nationwide in 2008.



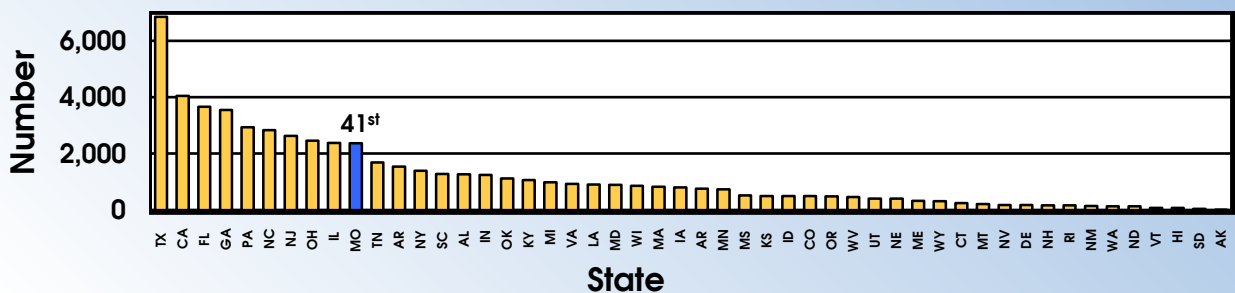
**Missouri's National Ranking in Number of Injury Commercial Vehicle Crashes  
2008**



**Missouri's National Ranking in Number of Injury Commercial Vehicle Crashes  
2007**



**Missouri's National Ranking in Number of Injury Commercial Vehicle Crashes  
2006**





### Number of fatalities and injuries in work zones-3i

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Troy Pinkerton, Traffic Liaison Engineer

#### Purpose of the Measure:

An important factor in evaluating the safety of Missouri's transportation system is determining the safety of work zones on the state's roads. This measure tracks the number of traffic-related fatalities, injuries, and overall crashes occurring in work zones on any Missouri public road.

#### Measurement and Data Collection:

Missouri law enforcement agencies are required to report crashes by submitting a standardized vehicle accident report form to the Missouri State Highway Patrol. MSHP personnel enter these reports into a statewide traffic crash database. MoDOT staff query and analyze this data to identify work zone-related

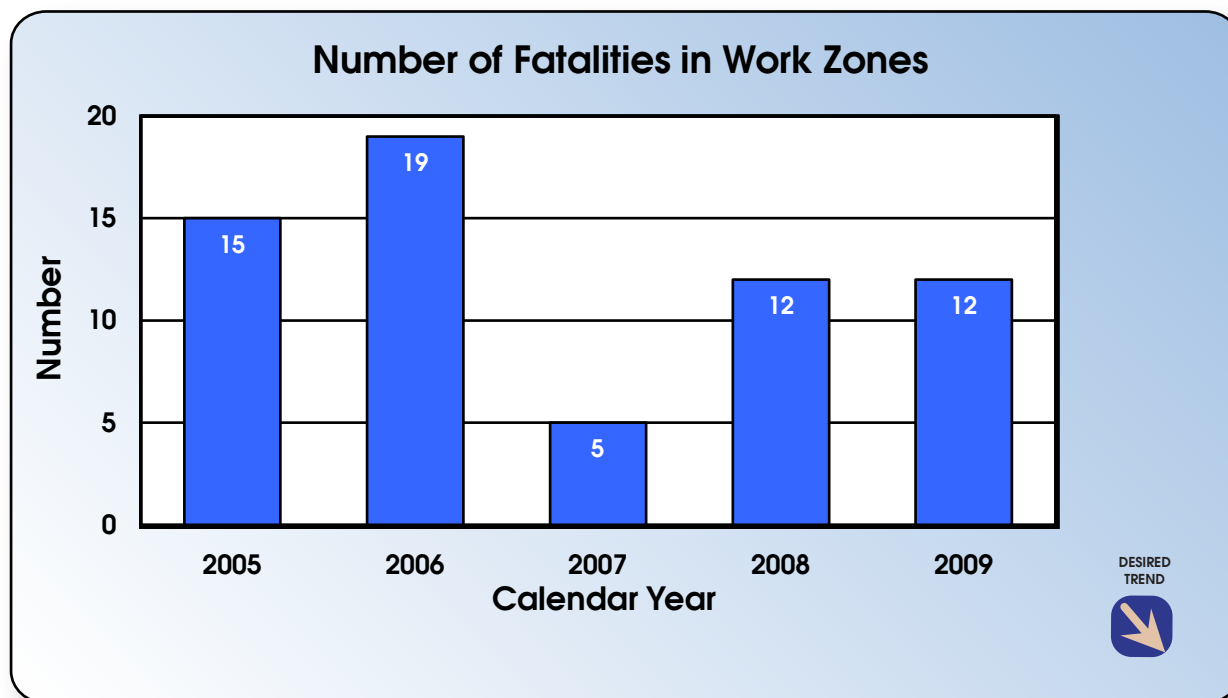
crash statistics quarterly and report the results via this measurement.

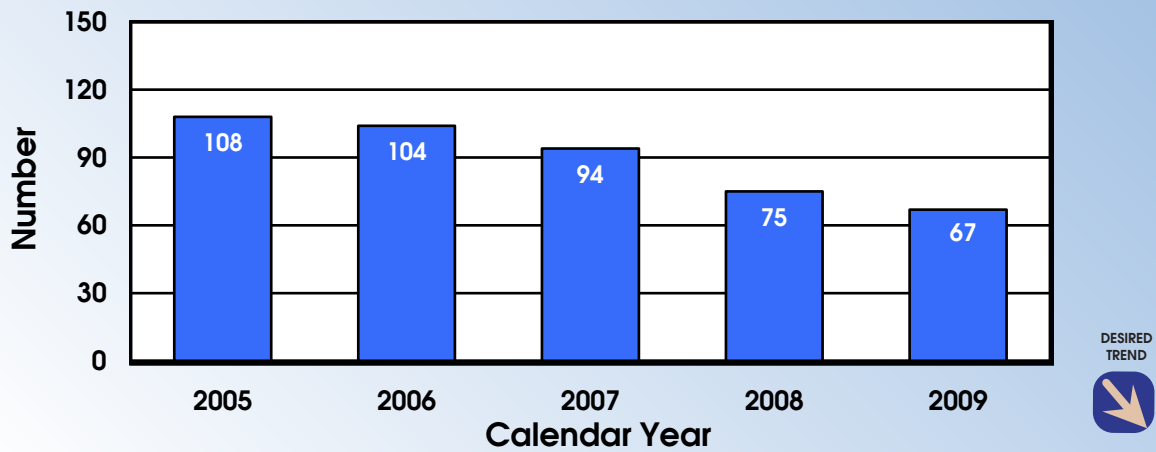
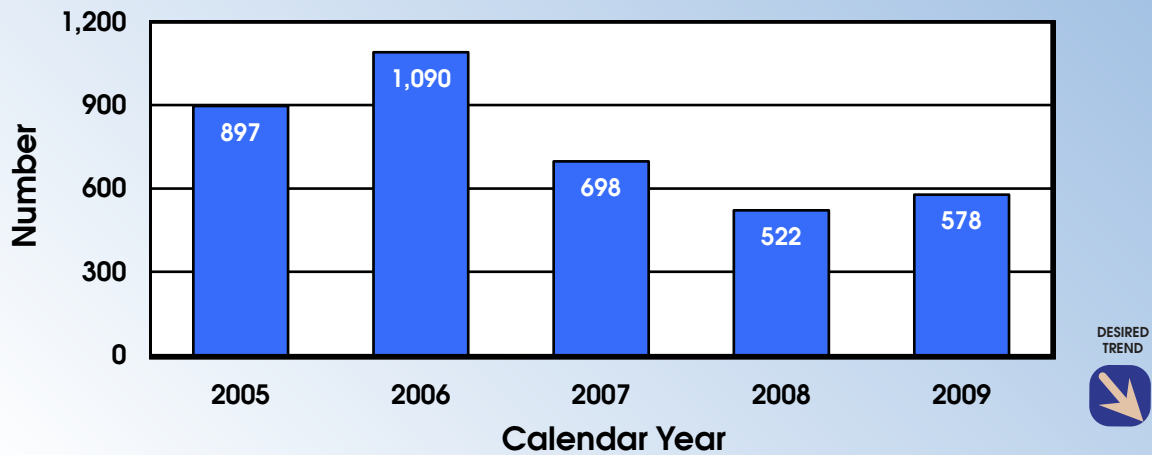
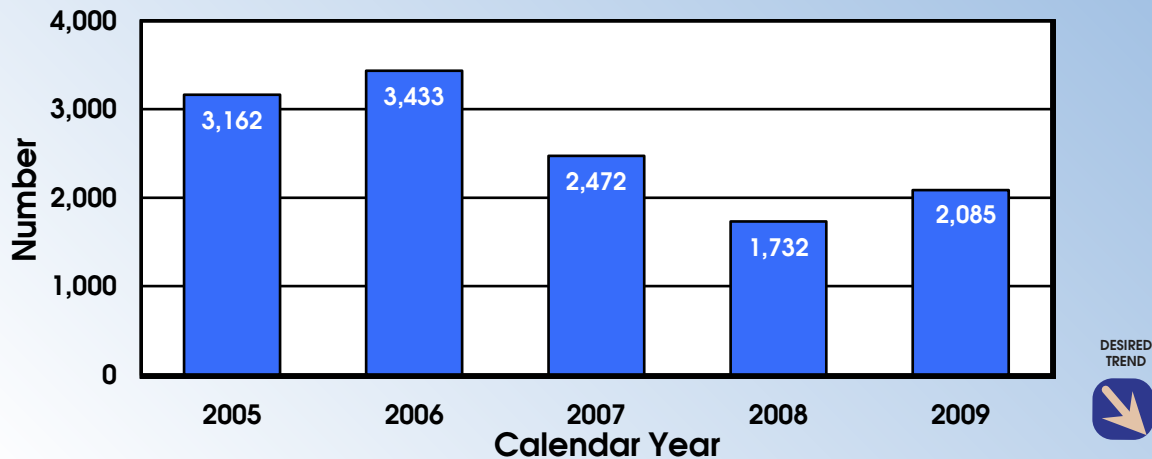
#### Improvement Status:

For this quarter, there were three fatal accidents resulting in three fatalities and that brings our current year to date total to 12. Unfortunately the number of crashes shows an increase. However, the severity of these crashes has fallen.

In order to continue to make our work zones safer, a new Work Zone Survey is available to the public that can be filled out and submitted online at:

<http://www.modot.mo.gov/workzones/Comments.htm>



**Number of Disabling Injuries in Work Zones****Number of Minor Injuries in Work Zones****Number of Crashes in Work Zones**

### Number of highway-rail crossing fatalities and collisions-3j

**Results Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Rod Massman, Administrator of Railroads

#### Purpose of the Measure:

This measure tracks annual trends in fatalities and collisions resulting from train-vehicle crashes at public railroad crossings in Missouri. This data drives the development and focus of a portion of the Missouri Highway Safety Plan. This plan is required annually by the National Highway Traffic Safety Administration and outlines key strategies to reduce these losses. In addition, this data supports the Missouri Blueprint for Safer Roadways. This document identifies the statewide initiatives with a goal of reducing fatalities in all areas of highway safety, including highway-rail crossing safety.

#### Measurement and Data Collection:

MoDOT collects crash data and enters it in a railroad safety information system, which also updates MoDOT's traffic management system. This does not include fatalities or collisions from those on railroad property at areas other than at public railroad crossings, which are tabulated separately. Missouri is then ranked with all other states using data from the Federal Railroad Administration that consists of the numbers of collisions and fatalities in each state. Data is updated quarterly.

#### Improvement Status:

In the first nine months of 2009, there were zero crossing fatalities. Unfortunately, there were six in

the last quarter of 2009, including three persons in one vehicle. The overall number of fatalities has basically been the same for the last four years, but MoDOT continues to focus on keeping fatalities low each year. In order to accomplish this, MoDOT has increased and implemented more public outreach efforts along with engineering improvements. This has included participating in various kinds of safety fairs, which includes presenting rail issues alongside other safety-related topics, renewing efforts to present rail crossing information at driver's education and other high school and grade school classes, and certifying additional MoDOT employees in giving Operation Lifesaver presentations. MoDOT also completed several crossing projects in this quarter, including projects in Newton County and in Brunswick, Missouri, which closed some crossings and redirected traffic to other fully-equipped crossings with lights and gates. The continuing focus is the three Es: engineering, education and enforcement. This effort is designed to increase public awareness and discussion of the need for increased safety and heightened awareness at railroad crossings and the dangers of walking on tracks or other railroad property.



**showmeOL.org**  
THE OFFICIAL WEBSITE FOR MISSOURI OPERATION LIFESAVER

**operation lifesaver**

- what is operation lifesaver?
- visit ool.org
- contact state coordinator
- other key links

**safety info**

- safety stats
- media press kit
- highway-rail facts
- exempt crossing locations

**education**

- presentation request form
- take the safety quiz
- curriculum & activities

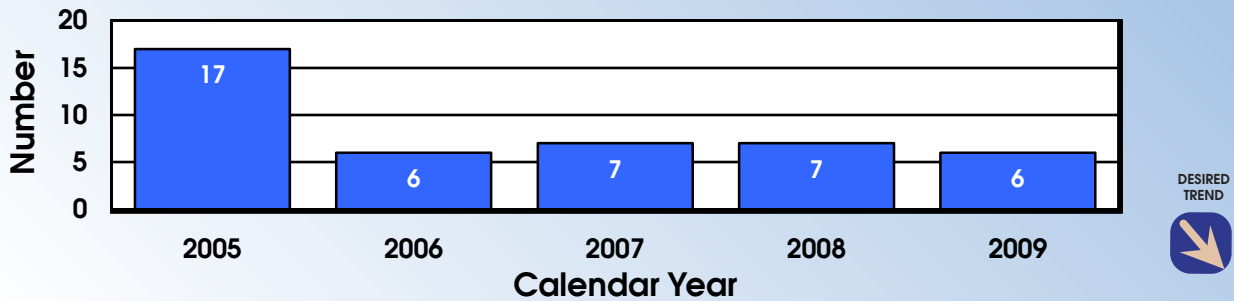
**multimedia**

- tv & radio psa's
- safety video clips
- missouri railroad photos

**OPERATION LIFESAVER Missouri**

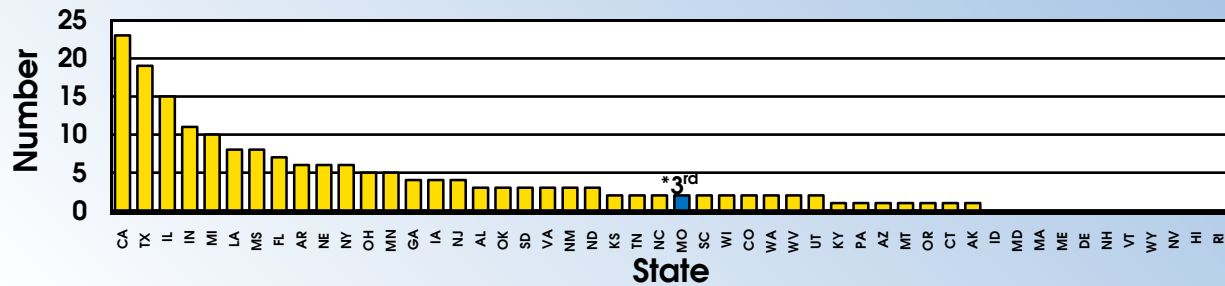
**LOOK, LISTEN...LIVE!**

### Number of Highway-Rail Crossing Fatalities

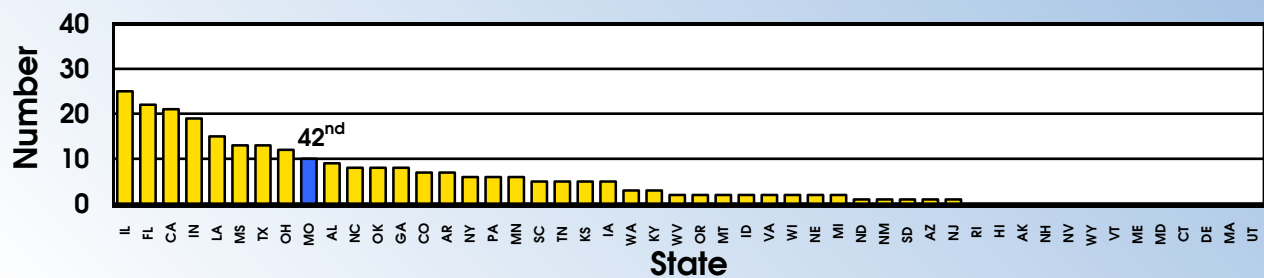


\*Tied for third with 10 other states

### Missouri's National Ranking in Number of Highway-Rail Crossing Fatalities January- October 2009

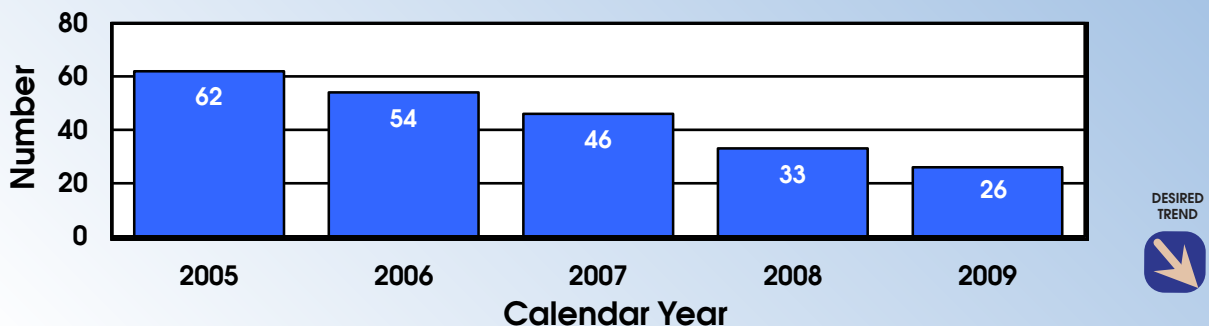


### Missouri's National Ranking in Number of Highway-Rail Crossing Fatalities January-December 2008

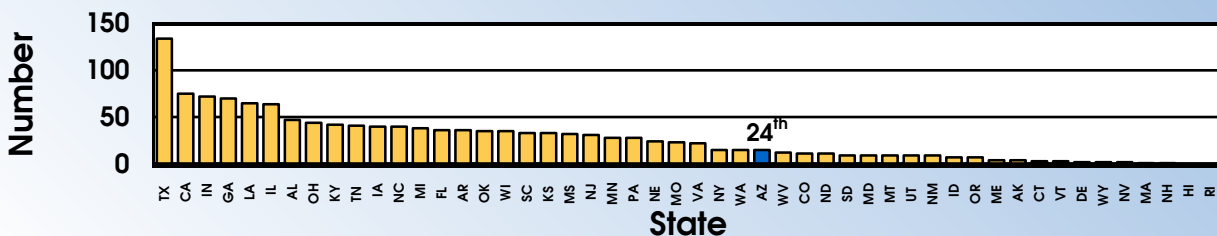




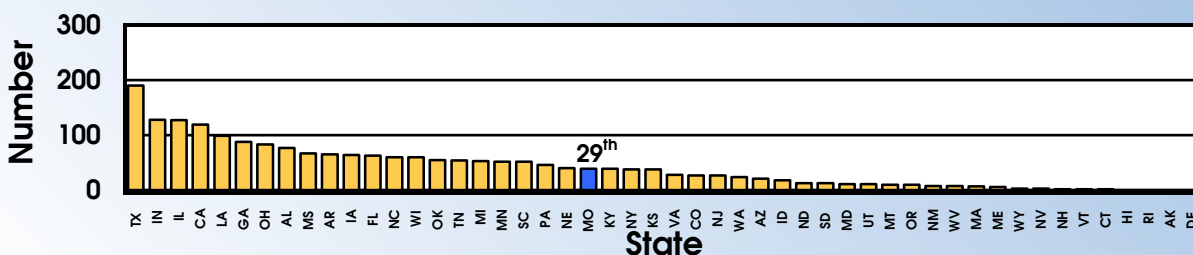
### Number of Highway-Rail Crossing Collisions



### Missouri's National Ranking in Number of Highway-Rail Crossing Collisions January-October 2009



### Missouri's National Ranking in Number of Highway-Rail Crossing Collisions January-December 2008



*(This page is intentionally left blank for duplexing purposes)*

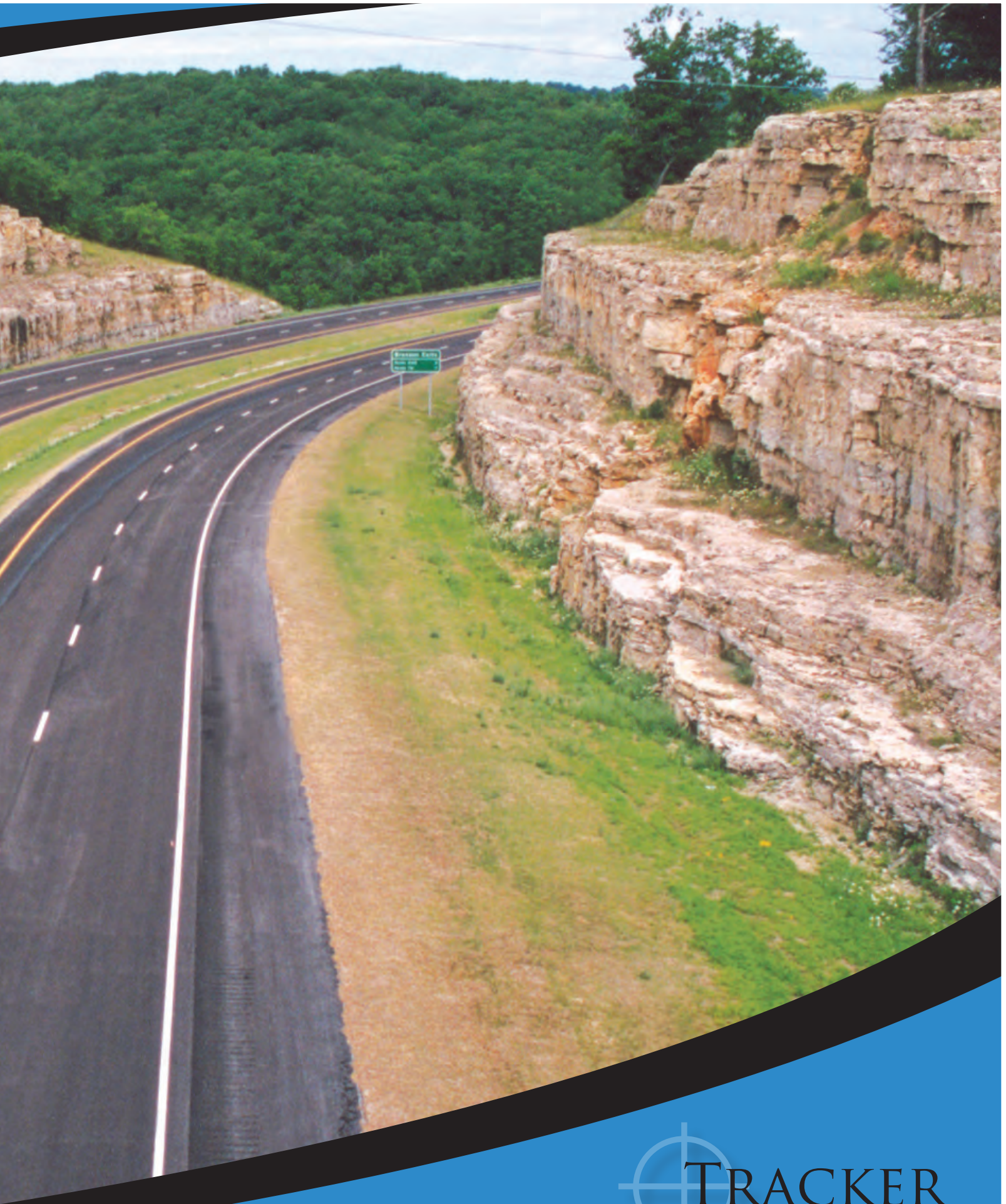


# ROADWAY VISIBILITY

*Tangible Result Driver – Don Hillis, Director of System Management*

Good roadway visibility in all weather and light conditions is critical to safe and efficient travel. MoDOT will delight its customers by using top-quality and highly visible stripes and signs.







## Rate of nighttime crashes- 4a

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Mike Curtit, Assistant State Traffic Engineer

### Purpose of the Measure:

This measure tracks the types of crashes where visibility of stripes and signs may be a contributing crash factor.

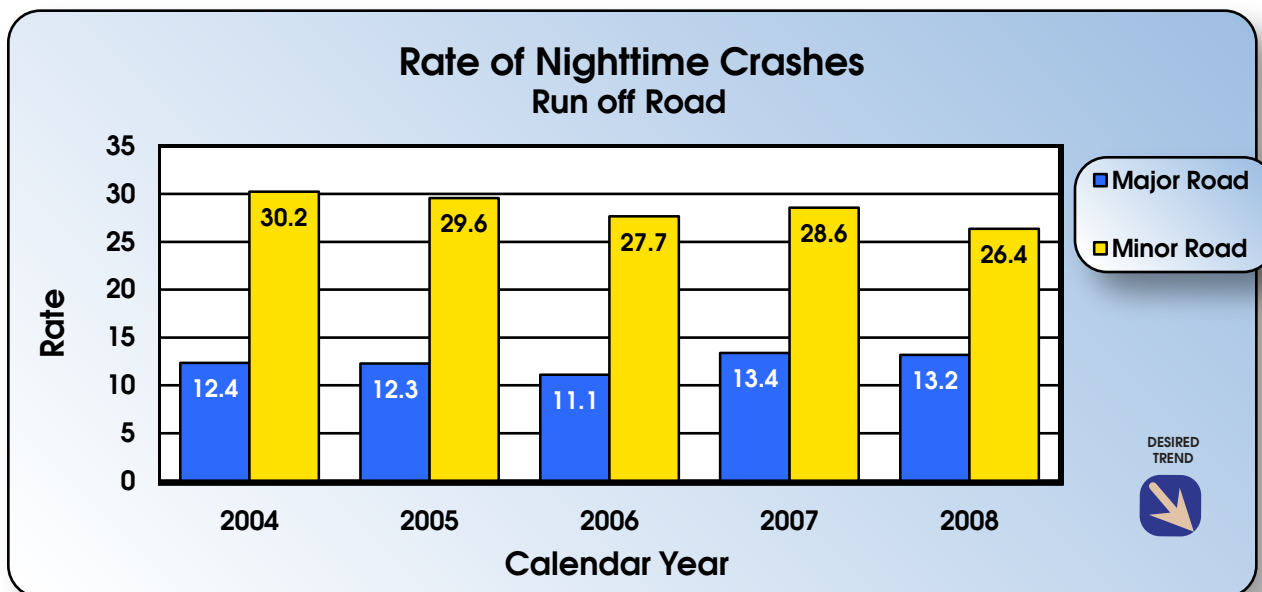
### Measurement and Data Collection:

Data is collected from the statewide crash database to identify and measure the rate of nighttime crashes. Further filtering of the data divides these night crashes by major and minor roadways. Major roadways are generally used for statewide or interstate travel and minor roadways are generally used for local traffic needs. Crash rates are calculated using the average annual daily traffic counts and are expressed in the unit, per 100 million vehicle miles (HMVM), which is the national standard for expressing crash rates. This is an annual measure with the data updated each April.

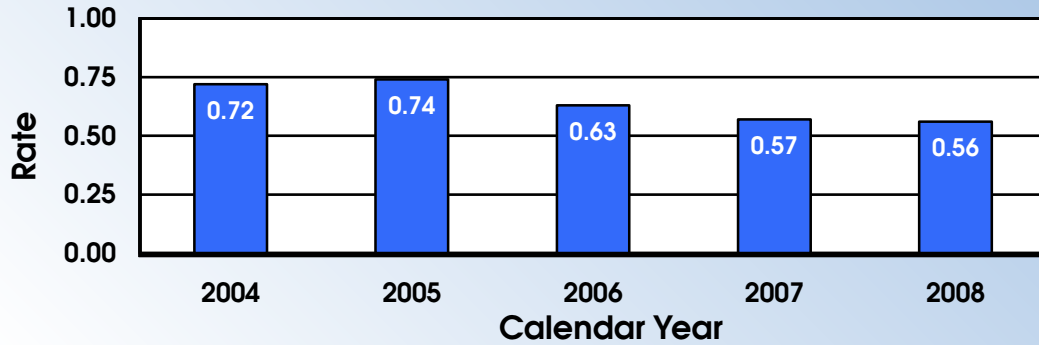
### Improvement Status:

The crash rate for run-off-road crashes decreased slightly on major roads and decreased seven percent on minor roads. The crash rate for cross-median crashes on major roads also decreased just slightly. The crash rate for head-on and sideswipe crashes continues to be stable for major roads, but decreased 23 percent this last year on minor roads. The crash rate for wet pavement crashes increased three percent for major roads, but decreased 12 percent for minor roads. Crashes during winter weather events for 2007 and 2008 were similar, but were significantly higher than previous years. Most of this increase continues to be in the non-injury crash categories.

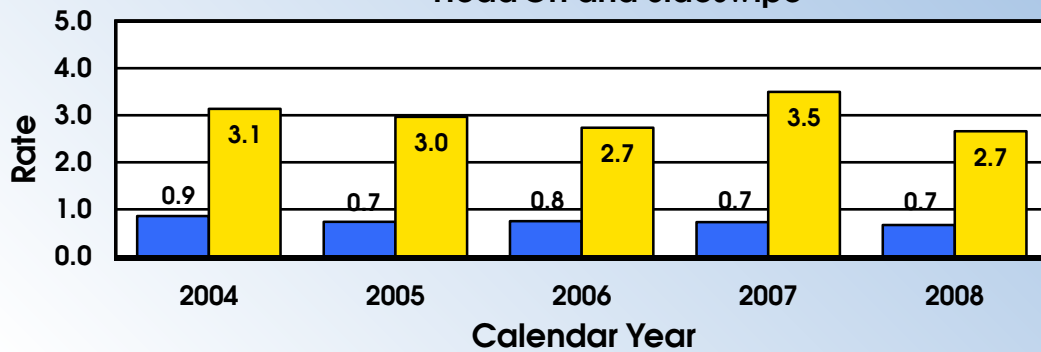
As part of the improvements included in the Better Roads, Brighter Future program, over 290 miles of edgeline rumble strips/strips and almost 120 miles of centerline rumble stripes have been installed.



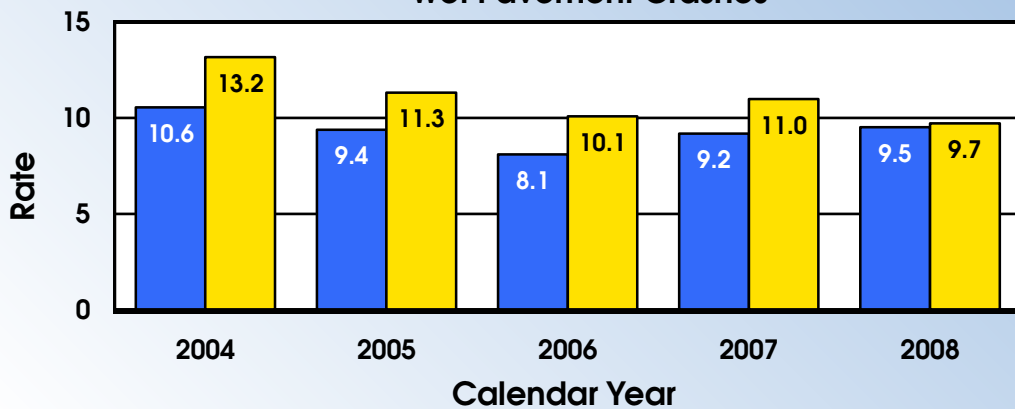
### Rate of Nighttime Crashes Cross Median on Major Roads



### Rate of Nighttime Crashes Head-On and Sideswipe



### Rate of Nighttime Crashes Wet Pavement Crashes



### Percent of signs that meet customers' expectations-4b

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Mike Curtit, Assistant State Traffic Engineer

#### Purpose of the Measure:

This measure will track whether the department's sign policy, design standards and sign replacement policy are resulting in visible signs that meet customers' expectations.

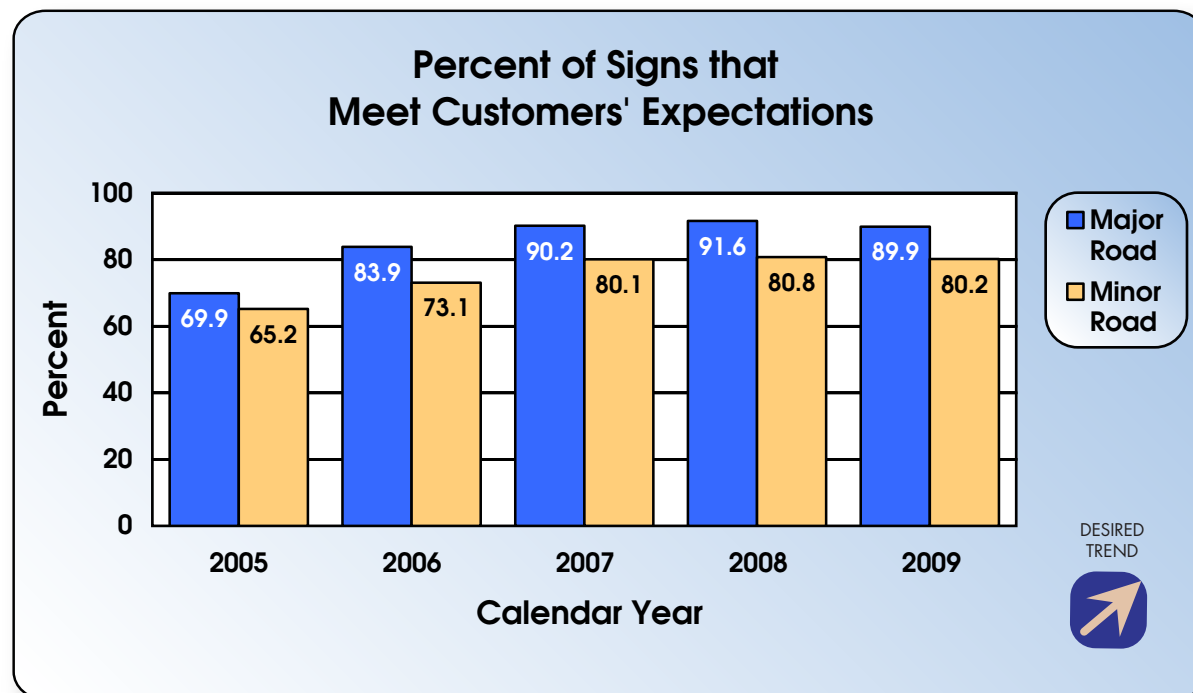
#### Measurement and Data Collection:

Sign-quality attributes that define user expectations have been developed based on an industry-wide literature review. The attributes selected for this measure are those that can be captured during a night sign log. A night sign log is conducted on randomly generated road segments. MoDOT employees drive a road at night, recording the location and condition of the signs, particularly how visible the signs are with headlights. MoDOT employees collect the data annually in the fall, and update it each October.

#### Improvement Status:

Almost 90 percent of signs on major highways are in good condition. Slightly over 80 percent of the signs on minor roads are in good condition. This represents a two percent decrease from last year for major roads and less than a one percent decrease for minor roads.

In the last twelve months, MoDOT's sign shop has produced over 110,000 new signs for the districts. MoDOT continues to perform annual inspections of every sign in Missouri and does random quality assurance reviews targeted at signing.



## Percent of stripes that meet customers' expectations-4c

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Jim Brocksmith, Traffic Liaison Engineer

### Purpose of the Measure:

This measure tracks whether MoDOT's striping policy, processes and materials used are resulting in visible stripes that meet customers' expectations.

### Measurement and Data Collection:

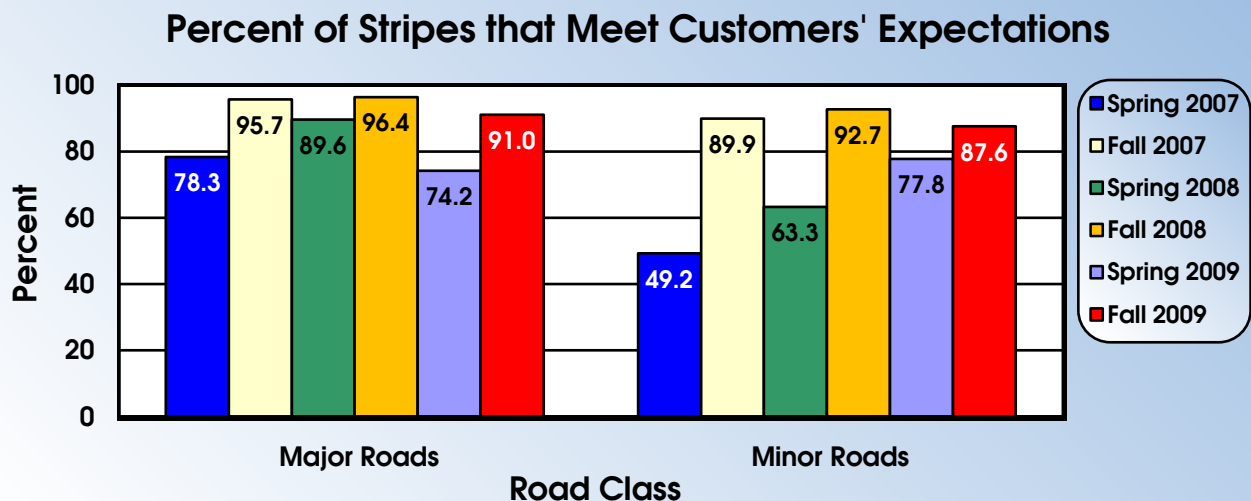
Striping quality attributes that define user expectations have been developed based on an industry-wide literature review. The attribute selected for this measure is the retroreflectivity of the striping or the visibility of the striping at night. Retroreflectivity is measured as the amount of light from vehicle headlights that is returned to the driver. We have established retroreflectivity benchmarks of 150 for white and 125 for yellow. These benchmarks were chosen because they are at the high end of what research and other states consider minimum acceptable levels. Data is collected by taking retroreflectivity readings on randomly selected road segments in the fall and spring of each year. This data is then compared to the benchmarks. Traffic volumes, winter weather and pavement condition all have an impact on the performance and durability of striping. The measurement unit for retroreflectivity is millicandelas per meter squared per lux ( $\text{mcd}/\text{m}^2/\text{lux}$ ). Fall readings are taken in October and November as the striping season is ending. Spring readings are taken in April, May and June to reflect the condition of the markings coming out of the winter when they are typically the poorest.

For the spring readings in 2009 we changed the amount and the way the readings are collected. The sampling size used was reduced both in the length of the samples and the number of samples used. We still have a statistically significant sample. These changes were implemented to reduce the costs associated with the data collection.

### Improvement Status:

The data was analyzed in respect to the above benchmarks MoDOT set as the minimum acceptable level of retroreflectivity. The readings on the major roads are at 91 percent, however they are some of the lowest fall readings. Some of this decline can be attributed to the durable markings which were installed in 2006 reaching the end of their expected service life. Minor roads are doing well at 87.6 percent. During the collection period rainfall was an issue across the state which delayed efforts to stripe those roads that needed to be done.

We are expanding the use of wet reflective markings with the retro-fitting of approximately 2,400 miles of major roads with rumble stripes over the next two years. In addition, approximately 5,300 miles of minor roads will have edgelines added over the next four years. Inlaid pavement markers will be installed on two sections of interstate highways to better evaluate their effectiveness and durability.





### Percent of work zones meeting expectations for visibility-4d

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Dan Smith, Traffic Management & Operations Engineer

#### Purpose of the Measure:

An important factor in evaluating the department's performance in temporary traffic control design, deployment, operation, and maintenance is the measurement of the effectiveness of the visual guidance provided to motorists in our work zones. This measure tracks how well the department meets customers' expectations of visibility in work zones on state highways.

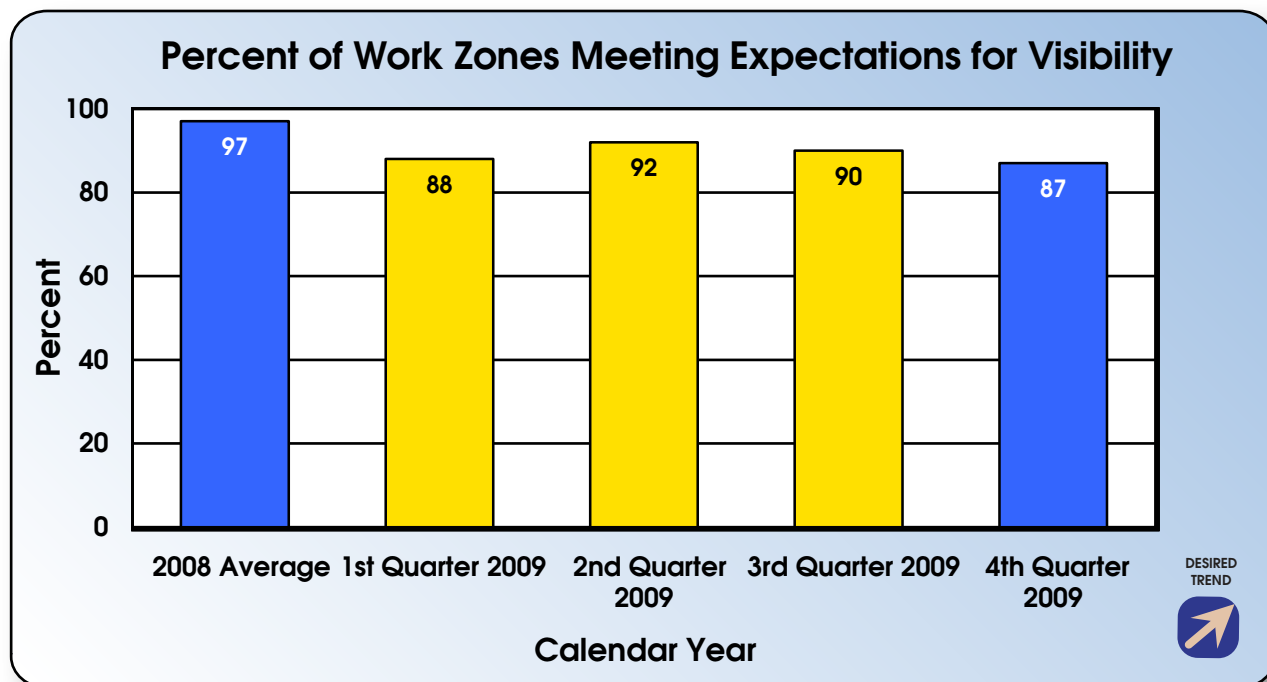
#### Measurement and Data Collection:

On January 1, 2009, MoDOT provided a Work Zone Customer Survey for the traveling public to provide evaluation of the visibility within work zones across the state. Each survey has several questions that address the early warning of work zones, visibility of signs and signals, did the cones, barrels or striping guide the person through the work zone, and did the work zone look clean and organized. The evaluator assigns a yes, no, or n/a rating to each of the

questions. The overall ratings are compiled quarterly and reported via this measurement. The survey is on MoDOT website at the following address:  
<http://www.modot.gov/workzones/Comments.htm>.

#### Improvement Status:

Compilation of the 2,172 surveys performed by the traveling public and MoDOT staff between January and September of this calendar year resulted in a decrease of positive satisfaction rating from 90 to 87 percent for work zone visibility. Since this is the first year the traveling public has had an opportunity to provide formal feedback on work zones, no historical data is available. For comparison purposes, the 2008 yearly average results of our technical staff inspections are included. The revised evaluation technique will allow MoDOT to align our priorities with that of our customers.



*(This page is intentionally left blank for duplexing purposes)*



## PERSONAL, FAST, COURTEOUS AND UNDERSTANDABLE RESPONSE TO CUSTOMER REQUESTS (INBOUND)

*Tangible Result Driver – Shane Peck, Community Relations Director*

Responding to customers in a courteous, personal and understandable way is important. MoDOT listens and seeks to understand, because it values everyone's opinion. MoDOT's goal is to delight them with its customer service.







## PERSONAL, FAST, COURTEOUS AND UNDERSTANDABLE RESPONSE TO CUSTOMER REQUESTS (INBOUND)

### Percent of overall customer satisfaction-5a

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Sally Oxenhandler, Community Relations Manager

#### Purpose of the Measure:

This measure tracks MoDOT's progress toward the mission of delighting its customers.

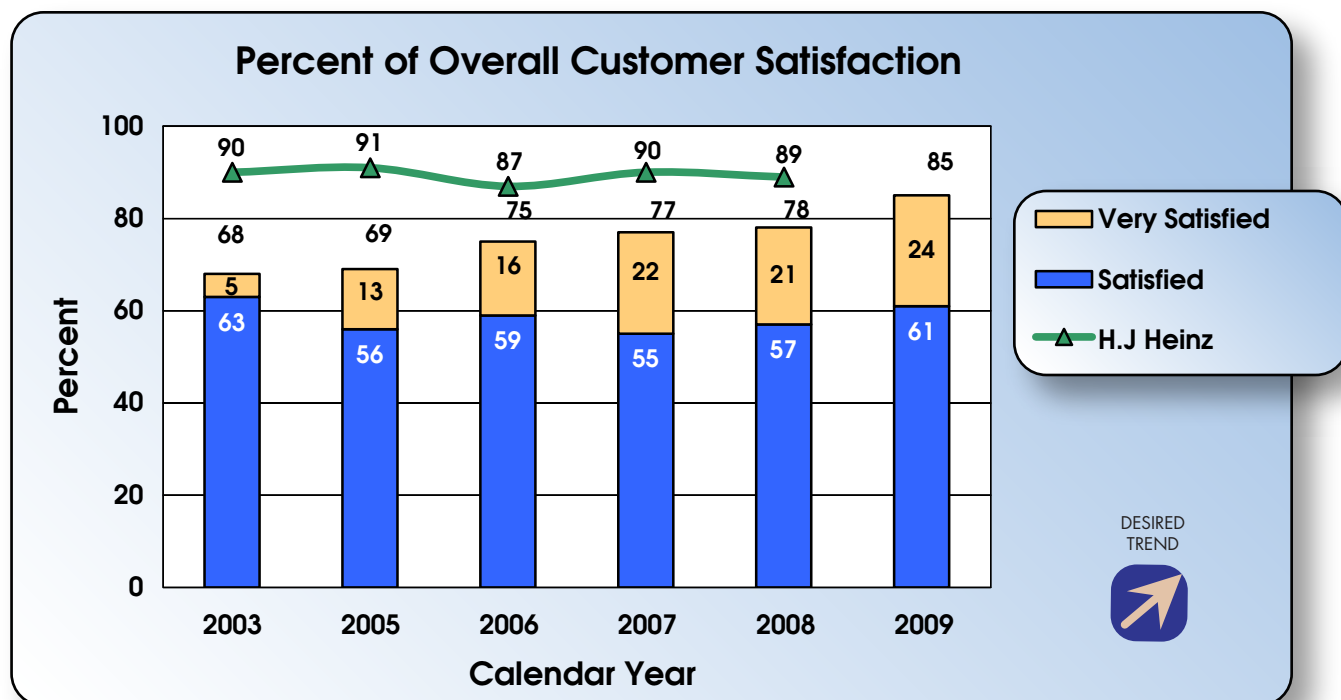
#### Measurement and Data Collection:

This is an annual measure. Data is collected from telephone interviews with more than 3,500 randomly selected adult Missourians each May. MoDOT is using H.J. Heinz as the benchmark for this measure. Based on information compiled by the American Customer Satisfaction Index, Heinz has the highest customer satisfaction rate – 89 percent – out of the 200 companies and government agencies that the ACSI scores.

#### Improvement Status:

MoDOT is nearing the national benchmark for customer satisfaction. A total of 85 percent of

Missourians are satisfied with MoDOT, a 7 percent increase from last year and a dramatic 21 percent increase in just 10 years. MoDOT's customer satisfaction is just four percentage points below H.J. Heinz, the national benchmark. The percentage of people who are very satisfied with MoDOT rose to 24 percent in 2009, up from 21 percent last year and 5 percent in 2003. In the past year, those who reported being dissatisfied with MoDOT dropped from 23 percent to 15 percent, an 8 percent decrease. The increase in customer satisfaction is likely attributed to MoDOT's efforts to improve road conditions, decrease highway fatalities, bring projects in on time and within budget, be open and transparent and provide timely, accurate and understandable information.



## PERSONAL, FAST, COURTEOUS AND UNDERSTANDABLE RESPONSE TO CUSTOMER REQUESTS (INBOUND)

### Percent of customers who contacted MoDOT that felt they were responded to quickly and courteously with an understandable response -5b

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Sally Oxenhandler, Community Relations Manager

#### Purpose of the Measure:

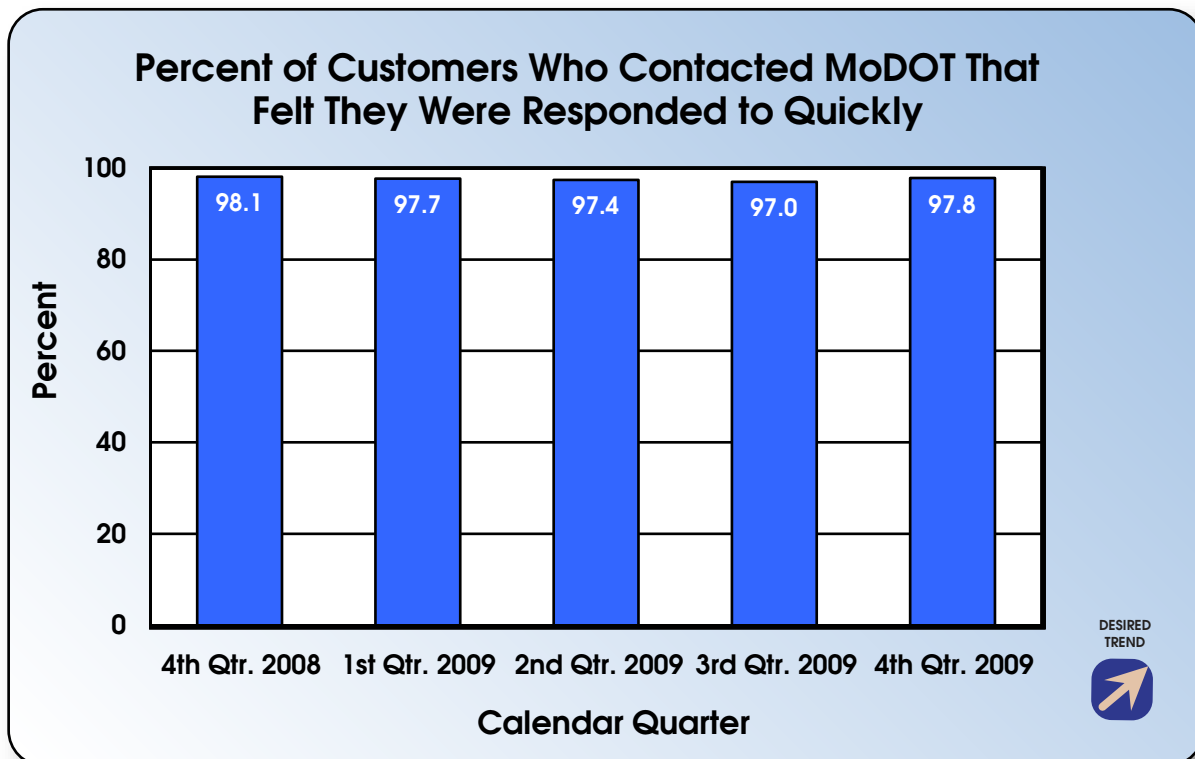
This measure indicates whether customers are comfortable with the speed, courtesy and clarity of MoDOT customer service.

#### Measurement and Data Collection:

Customers who contact MoDOT Customer Service Centers are asked to complete a short telephone survey when their business with the customer service representatives is complete. Callers who agree are forwarded to an automated survey that asks three “yes or no” questions on the timeliness, accuracy and courtesy of the call.

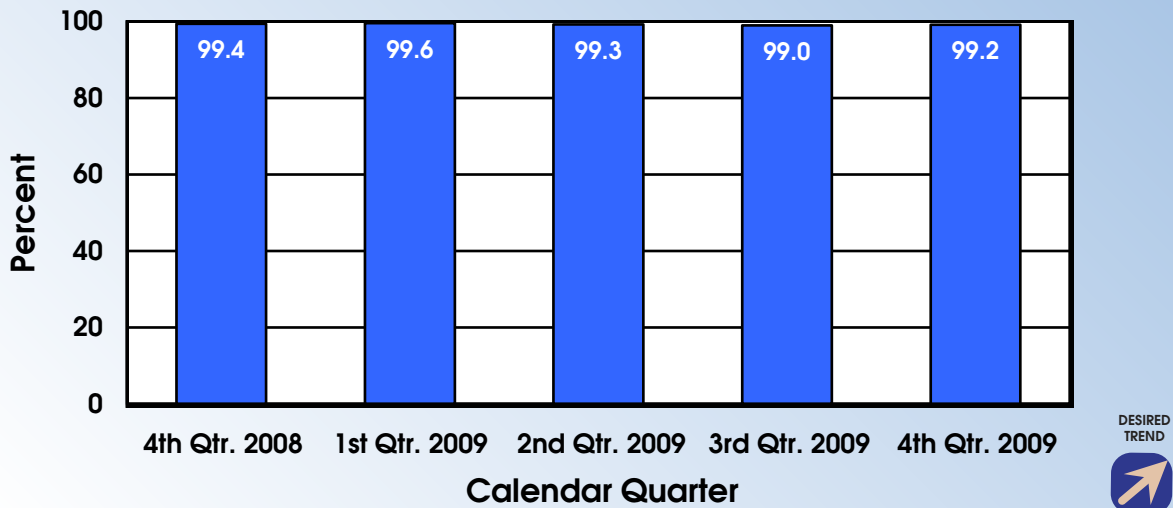
#### Improvement Status:

The percentage of customers that feels they received prompt, courteous and understandable service remains extremely high. Based on 5,098 surveys, 97.8 percent felt they were responded to quickly; 99.2 percent felt they were treated courteously and 98.3 percent felt the response they received was understandable. MoDOT customer service representatives continue to do an outstanding job in providing a positive first point of contact for MoDOT.

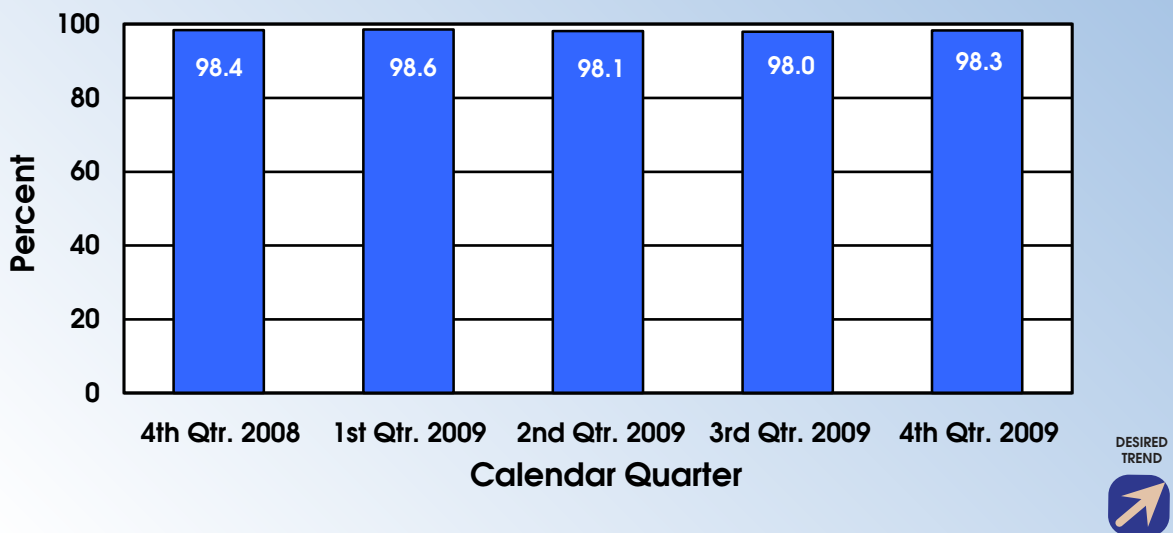


PERSONAL, FAST, COURTEOUS AND UNDERSTANDABLE RESPONSE TO CUSTOMER REQUESTS (INBOUND)

**Percent of Customers Who Contacted MoDOT That Felt They Were Responded To In a Personal and Courteous Manner**



**Percent of Customers Who Contacted MoDOT That Understood the Response Given**



## PERSONAL, FAST, COURTEOUS AND UNDERSTANDABLE RESPONSE TO CUSTOMER REQUESTS (INBOUND)

### Percent of documented customer requests responded to within 24 hours -5c

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Sally Oxenhandler, Community Relations Manager

#### Purpose of the Measure:

This measure tracks how quickly MoDOT responds to customer requests through the customer service centers.

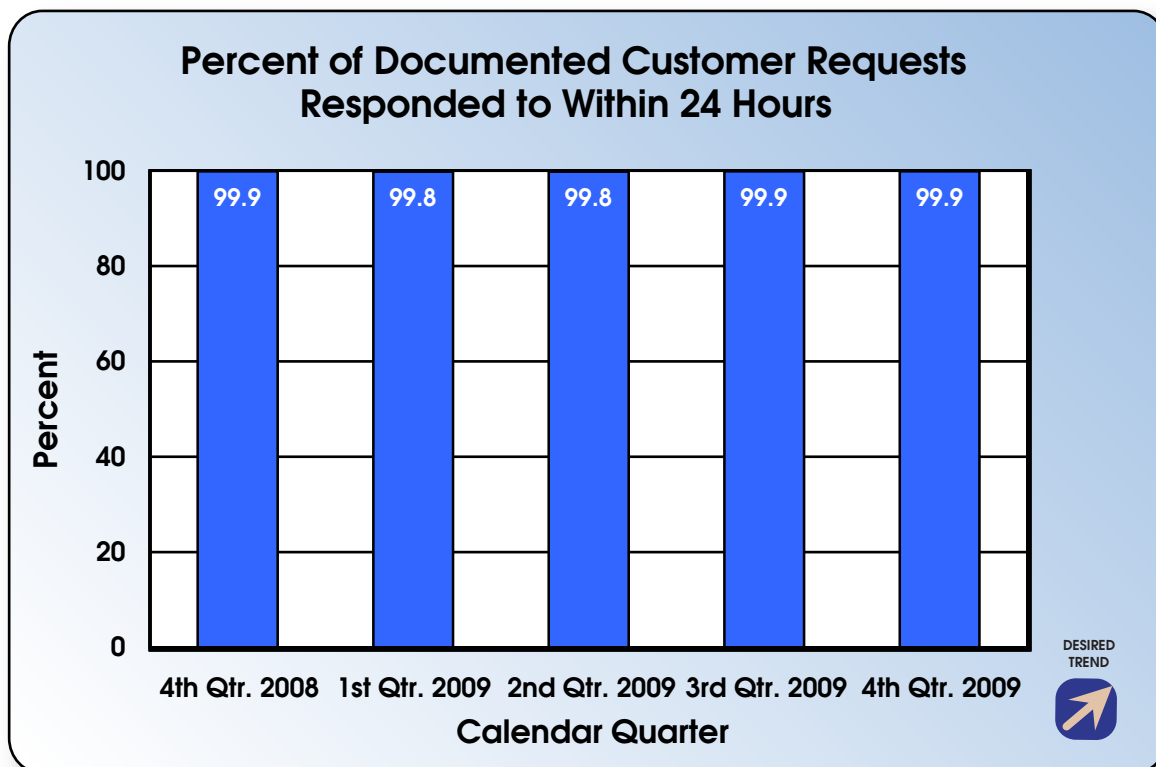
customer requests are responded to immediately, including basic phone call transfers, questions, or requests for general information; these routine contacts are not documented here.

#### Measurement and Data Collection:

This information comes from the customer service database, where customer requests requiring follow-up are documented from the time the call comes in until the request is responded to. This may include requests for signs, traffic signal review, pothole patching or work zone congestion. Almost all

#### Improvement Status:

Virtually 100 percent of the 6,600 customer requests in the fourth quarter of 2009 were responded to within 24 hours. This number has remained extremely high since we first began tracking the data.





## PERSONAL, FAST, COURTEOUS AND UNDERSTANDABLE RESPONSE TO CUSTOMER REQUESTS (INBOUND)

### Average completion time on requests requiring follow up-5d

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Sally Oxenhandler, Community Relations Manager

#### Purpose of the Measure:

This measure tracks MoDOT's responsiveness to customer inquiries that are received through the customer service centers and documented in the database.

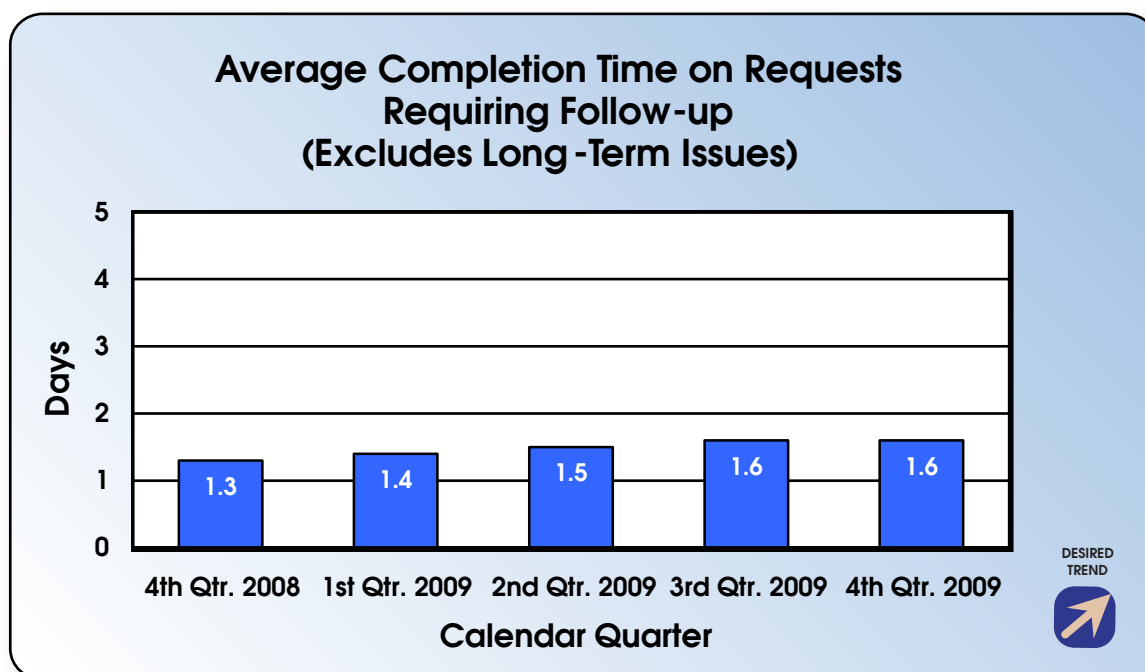
longer-term requests would skew the overall results. Time is measured in working days; weekends and holidays are excluded.

#### Measurement and Data Collection:

Customer requests in the customer service database are tracked for average completion time. Longer-term requests that require more than 30 days to complete are removed from the results because

#### Improvement Status:

On average, customer requests in the fourth quarter of 2009 were completed in 1.6 days, the same as last quarter, but slightly higher than the fourth quarter of last year. There were 6,600 customer requests this quarter.



*(This page is intentionally left blank for duplexing purposes)*





# PARTNER WITH OTHERS TO DELIVER TRANSPORTATION SERVICES

*Tangible Result Driver – Kevin Keith, Chief Engineer*

To be an effective leader in transportation, MoDOT must work with agencies and branches of government, including state, county, private industry and municipalities to deliver a quality transportation system that meets the needs of everyone. A coordinated transportation system requires partnerships to ensure compatible decisions are made. Partnering builds trust and ensures quality results.



## Number of dollars of discretionary funds allocated to Missouri - 6a

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Todd Grosvenor, Financial Resource Administrator

### Purpose of the Measure:

This measure shows the amount of discretionary funds allocated to Missouri.

### Measurement and Data Collection:

This is an annual measure updated each January. The federal government allocates discretionary funds to states for specific highway and multimodal projects. Multimodal projects include waterway, aviation, transit and rail activities. These funds are distributed administratively for programs that do not have statutory distribution formulas. States compete for these funds, which are above the formula apportionments. Resource Management collects this information from the Federal Highway Administration, Federal Transit Administration, Federal Aviation Administration and Federal Railroad Administration. Missouri's share of the total highway funds allocated nationwide over the last five years is 4.2 percent, which ranks third. The state of California received the largest share with 14.6 percent. Missouri's share of the total multimodal funds allocated nationwide over the last five years is 1.4 percent, which ranks 25th.

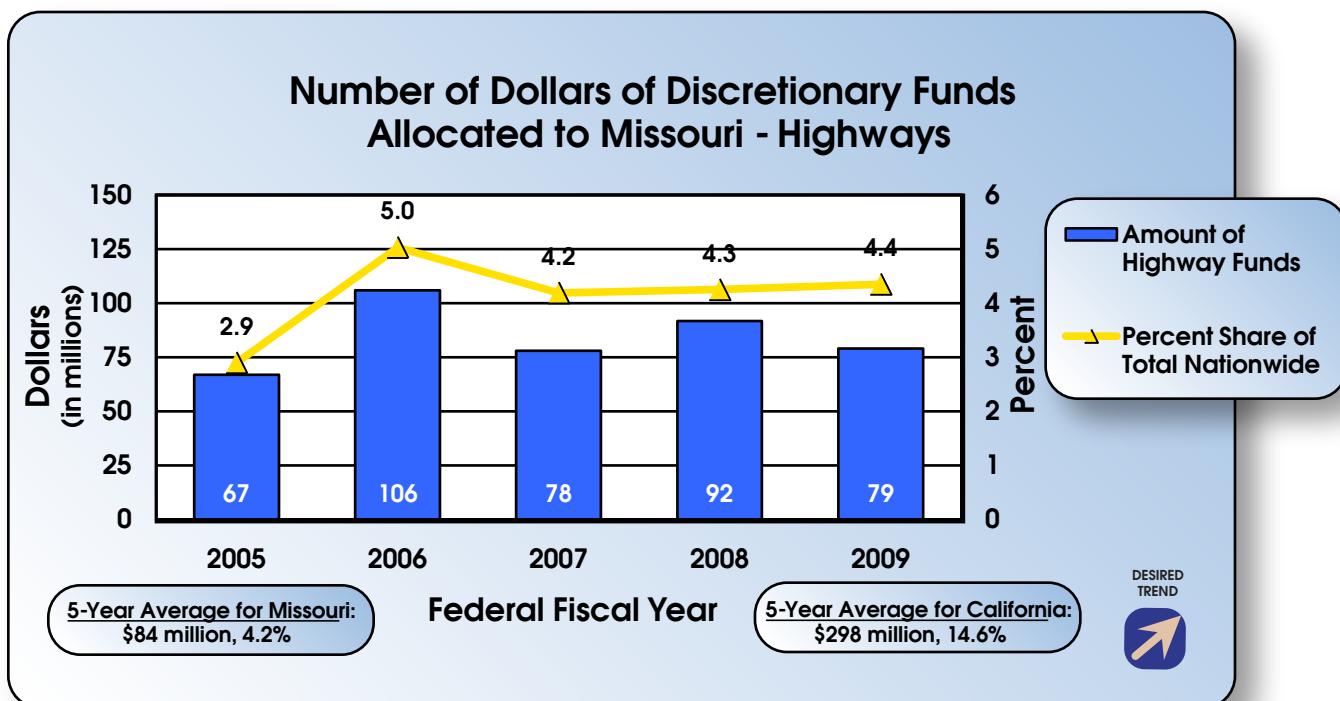
The state of New York received the largest share with 15.3 percent.

### Improvement Status:

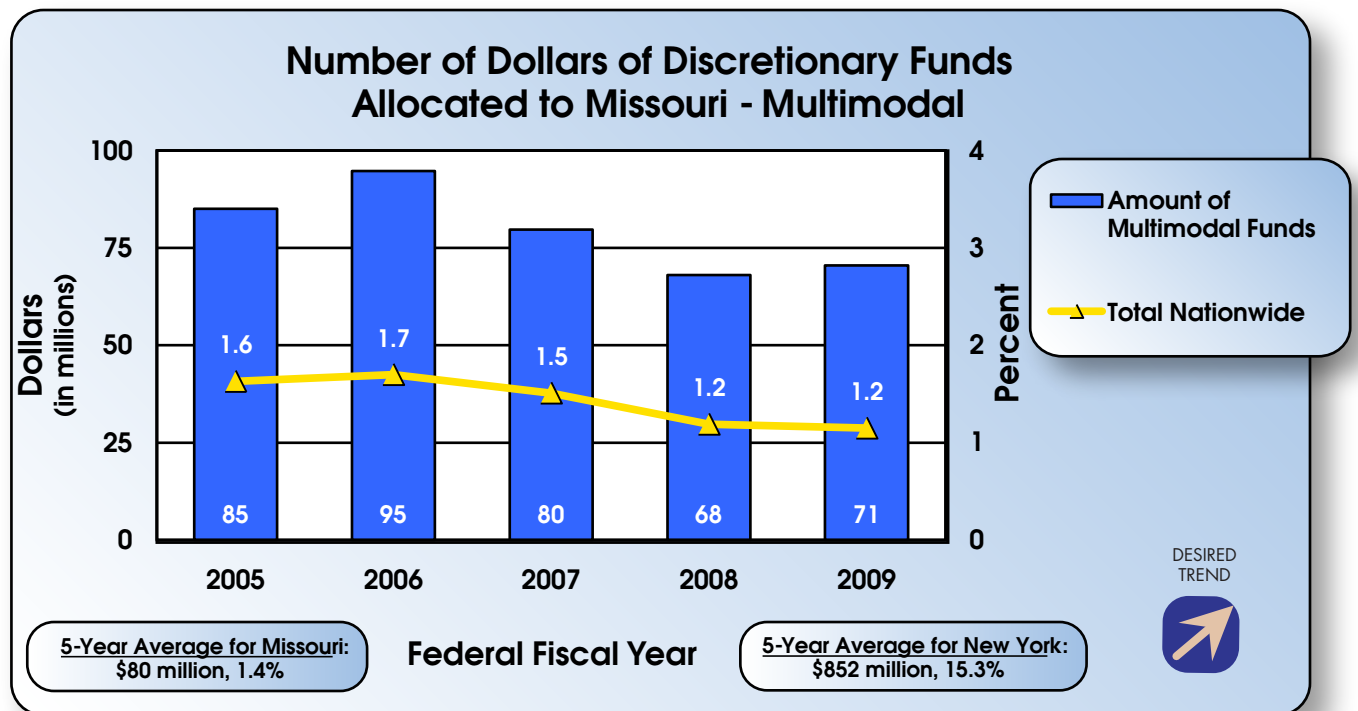
Discretionary funds allocated to Missouri for highway projects decreased in 2009. This was mainly due to a decrease in the funds made available from the annual appropriations bill. The funds allocated to Missouri decreased 14 percent from 2008 to 2009, while the funds allocated nationwide decreased 16 percent.

Discretionary funds allocated to Missouri for multimodal projects increased in 2009. This was mainly due to an increase in transit funds. The funds allocated to Missouri increased 4 percent, while the funds allocated nationwide increased 7 percent.

MoDOT works closely with Missouri's congressional delegates to identify specific transportation projects that are good candidates for discretionary funds.



## PARTNER WITH OTHERS TO DELIVER TRANSPORTATION SERVICES



### Percent of earmarked dollars that represent MoDOT's high priority highway projects-6b

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Todd Grosvenor, Financial Resource Administrator

#### Purpose of the Measure:

This measure shows the percent of earmarked dollars that represent MoDOT's high priority highway projects.

#### Measurement and Data Collection:

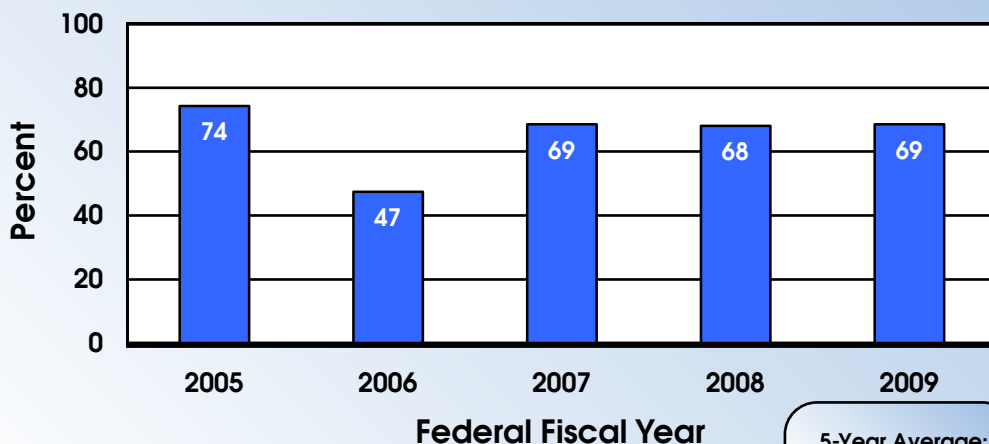
This is an annual measure updated each January. Earmarked dollars are federal funds allocated to states for specific highway projects. These funds are distributed administratively for programs that do not have statutory distribution formulas. States compete for these funds, which are above the formula apportionments. Resource Management collects this information from the Federal Highway Administration. MoDOT's high priority highway projects are identified in the Federal Priorities list that is prepared by Governmental Relations. This list is provided to Missouri's congressional delegates.

#### Improvement Status:

Missouri's earmarked dollars for specific highway projects decreased in 2009. This was mainly due to a decrease in the funds made available from the annual appropriations bill. However, the percent of earmarked dollars that represent MoDOT's high priority highway projects increased slightly. Many of the earmarked dollars were for projects identified on our Federal Priorities list. Over the last five years, MoDOT's high priority highway projects received 65 percent of the earmarked dollars.

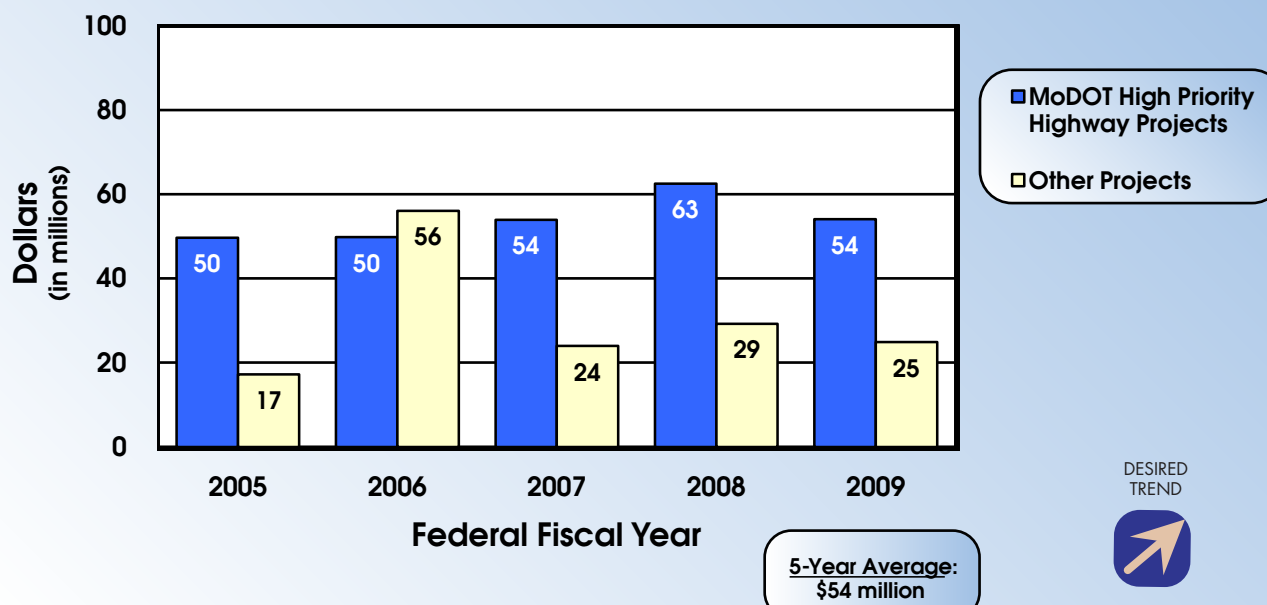
MoDOT works closely with Missouri's congressional delegates to identify MoDOT's high priority highway projects that are good candidates for earmarked dollars.

**Percent of Earmarked Dollars That Represent MoDOT's High Priority Highway Projects**





**Number of Earmarked Dollars Representing MoDOT's High Priority Highway Projects**





### Number of dollars generated through cost-sharing and other partnering agreements-6c

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Todd Grosvenor, Financial Resource Administrator

#### Purpose of the Measure:

This measure shows the number of dollars invested by cities, counties, transportation corporations, transportation development districts and others for state highway system improvements. It monitors the effectiveness of MoDOT's cost-sharing and partnering programs. MoDOT allocates \$30 million per year for projects proposed by entities willing to assist in a project's funding that will benefit the state highway system.

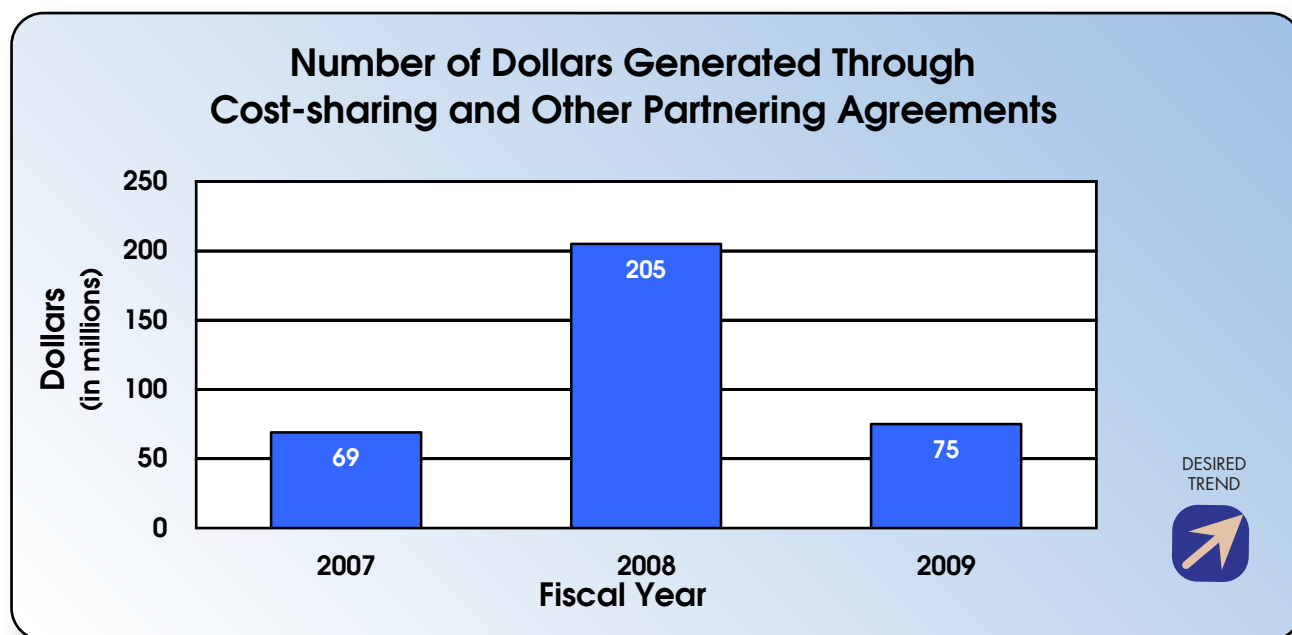
#### Measurement and Data Collection:

This is an annual measure updated each October. Resource Management collects this data from the Statewide Transportation Improvement Program (STIP) and Permits databases. The dollars are shown in the state fiscal year in which construction contracts are awarded and permits are issued.

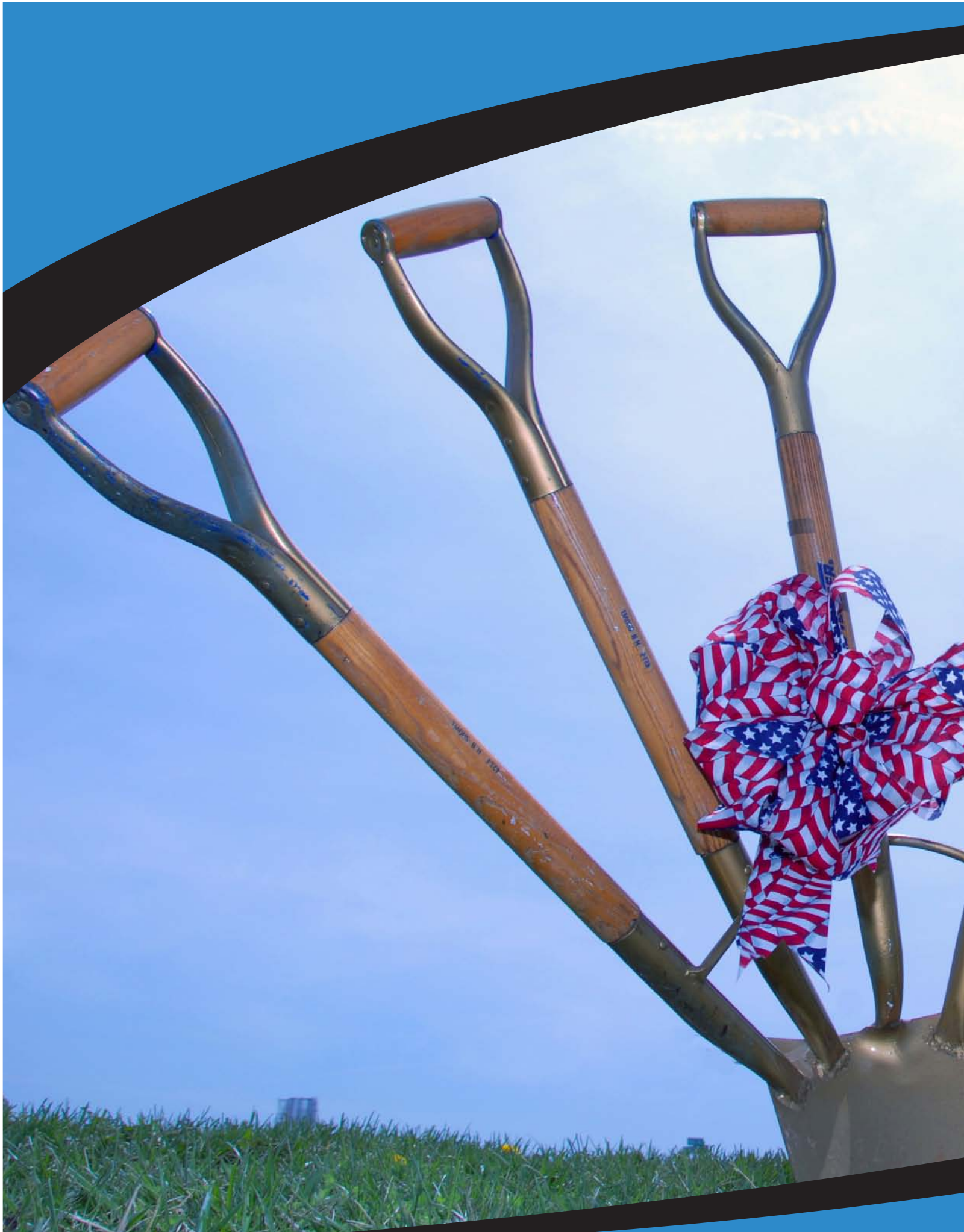
#### Improvement Status:

The number of dollars decreased in fiscal year 2009 compared to fiscal year 2008. The decrease is due to the construction contract awards of some major cost-share projects in fiscal year 2008 such as Route 36 in Macon, Marion, Monroe and Shelby counties, Route 100 in Franklin County and Route 67 in Madison and Wayne counties totaling \$115 million. In fiscal year 2009, construction contracts were awarded for the following cost-share projects: Route 470 in Jackson County, Route 71 in Cass County, Route 61 in Lincoln County, Route 50 in Franklin County, Route H in Greene County, Route 72 in Madison County and others.

MoDOT markets the cost sharing and partnering programs throughout the state to build partnerships with entities to pool efforts and resources to accomplish what may have previously seemed unlikely.



*(This page is intentionally left blank for duplexing purposes)*





# LEVERAGE TRANSPORTATION TO ADVANCE ECONOMIC DEVELOPMENT

*Tangible Result Driver – Roberta Broeker, Chief Financial Officer*

Transportation is essential to Missouri's economic well-being. It plays a critical role in creating jobs and stimulating lasting growth for Missouri. In addition, focusing on ways to advance economic development helps MoDOT achieve its mission of promoting a prosperous Missouri.



## LEVERAGE TRANSPORTATION TO ADVANCE ECONOMIC DEVELOPMENT

### Number of miles of new four-lane corridors completed-7a

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Jay Bledsoe, Transportation System Analysis Engineer

#### Purpose of the Measure:

This measure tracks the miles of additional divided highways available to the public. Access to a divided highway system supports economic development in Missouri. One of MoDOT's recent priorities has been completion of four-lane corridors in order to connect segments of highway where gaps exist.

#### Measurement and Data Collection:

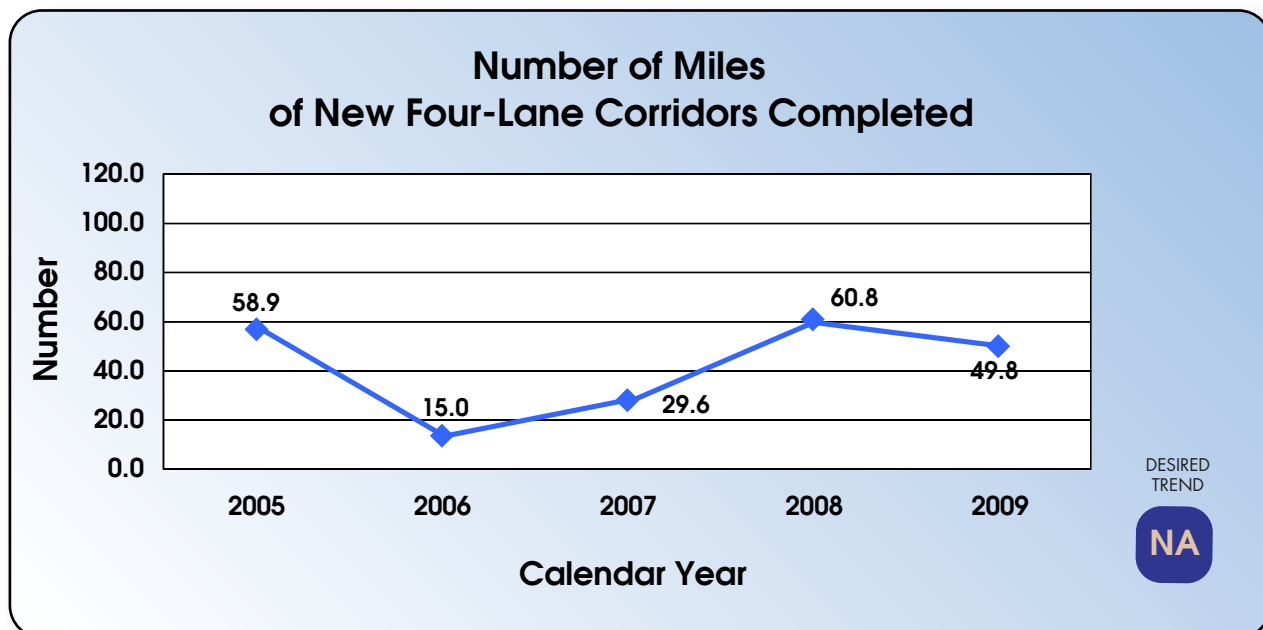
Projects that create or complete sections of dual-divided highways are identified and tracked. Completion is defined as the date the project is opened to traffic. This is an annual measure updated each January.

#### Improvement Status:

Nearly 50 miles of new four-lane corridors were completed during calendar year 2009, primarily on U.S. Routes 60, 67 and 65. Progress in 2009 was nearly the same as that of 2008 as projects funded by

Amendment 3 bonds approved by Missouri voters in November 2004 were completed. ARRA funding will accelerate the completion of some future expansion projects. There are approximately 54 miles of work to complete four-lane highways included in the current five-year Statewide Transportation Improvement Program.

A MoDOT study completed in 2007 looked at seven major economic indicators in non-urbanized counties. The indicators are county population, annual wages, household income, number of business firms, gross sales tax, real estate valuations and per capita income. Results showed that counties that have more than 15 miles of four-lane highway scored from 9 to 183 percent higher in these areas than counties with a lesser number of divided miles.



## Percent utilization of SIB & STAR loan programs-7b

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Brenda Morris, Resource Management Director

### Purpose of the Measure:

This measure shows the percent utilization of MoDOT's revolving loan programs, the Missouri State Infrastructure Bank (SIB) and the State Transportation Assistance Revolving (STAR) program.

The SIB program, which is administered by the Missouri Transportation Finance Corporation (MTFC), was authorized by federal law in 1995 to finance both highway and non-highway projects. The STAR program finances non-highway projects such as air, water, rail or mass transit facility construction, mass transit vehicles and vehicles for elderly or handicapped people. STAR funding is appropriated by the General Assembly.

### Measurement and Data Collection:

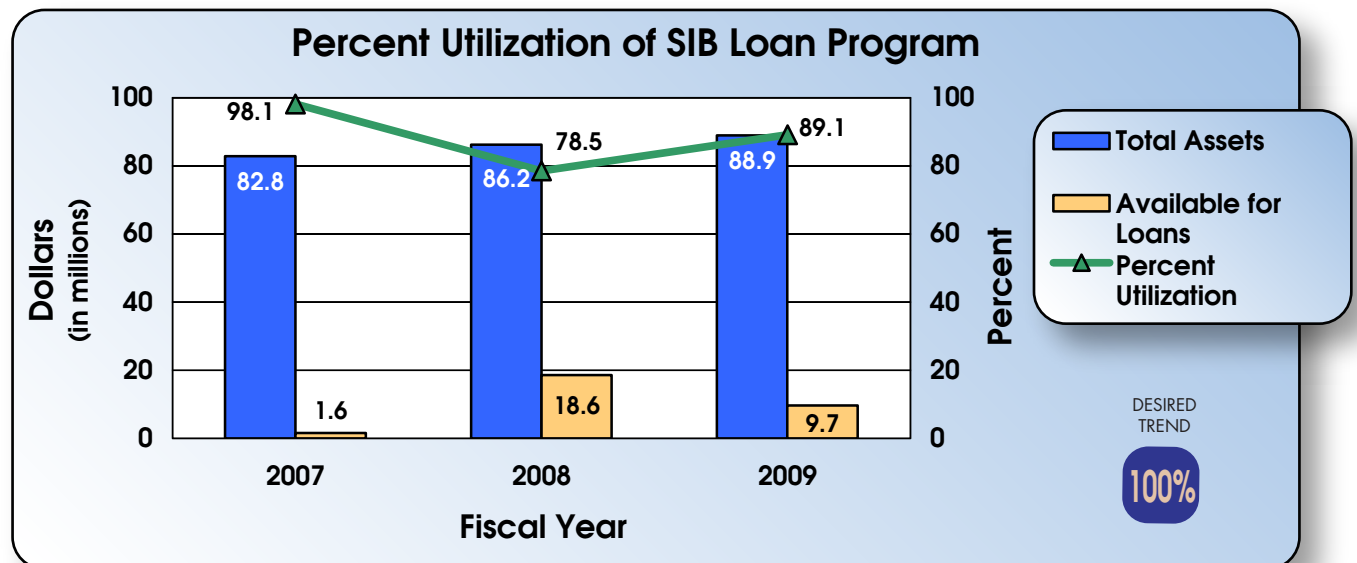
This is an annual measure updated each July. The percent utilization is the total assets less cash available for loans divided by total assets. Resource Management collects this data from financial reports and a SIB and STAR loans database.

### Improvement Status:

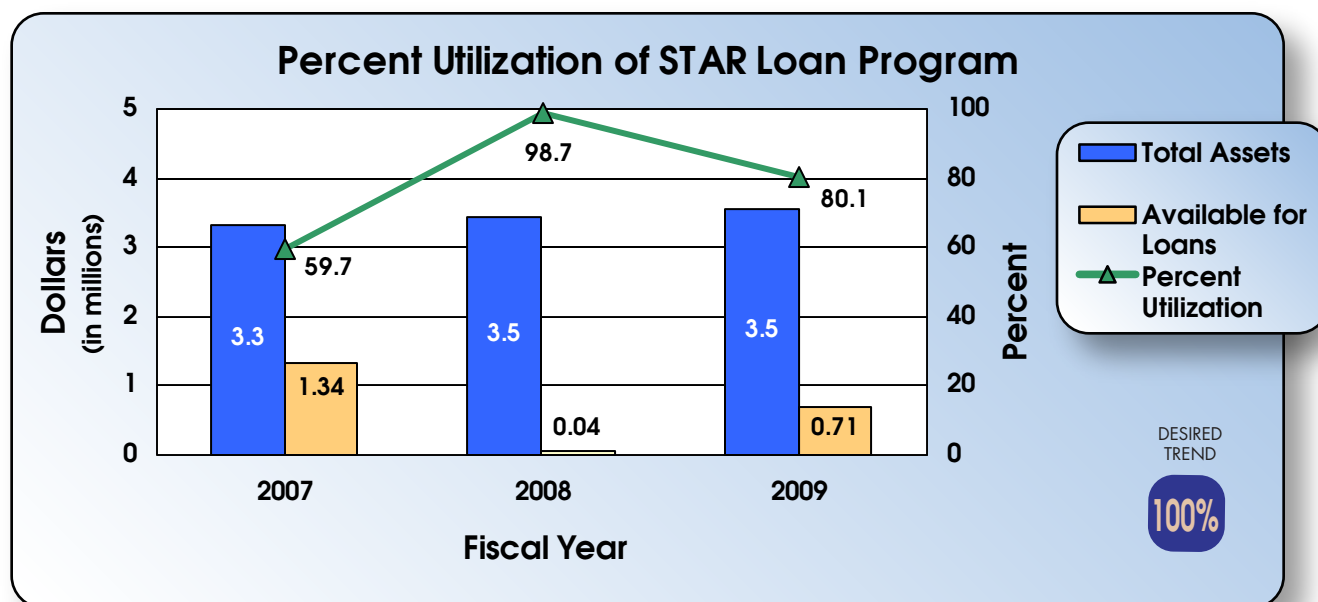
The percent utilization of the SIB loan program increased to 89.1 percent as of June 30, 2009. The amount available to loan decreased because: eleven entities were approved for loans totaling \$23.7 million; five entities determined they did not need their loans totaling \$13.2 million; three entities reduced their loan amounts by \$4.9 million; and adjustments were made to the timing of disbursements and repayments.

The percent utilization of the STAR loan program decreased to 80.1 percent. The amount available for loans increased due to loan repayments and investment earnings. The STAR fund has approximately \$705,000 available for loans.

Resource Management held partnership development training workshops at all districts in fiscal year 2009.



## LEVERAGE TRANSPORTATION TO ADVANCE ECONOMIC DEVELOPMENT



## Economic return from transportation investment-7c

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Ben Reeser, Financial Resource Administrator

### Purpose of the Measure:

This measure tracks the economic impact resulting from the state's transportation investments. Economists have found that transportation investments affect employment, personal income and economic output.

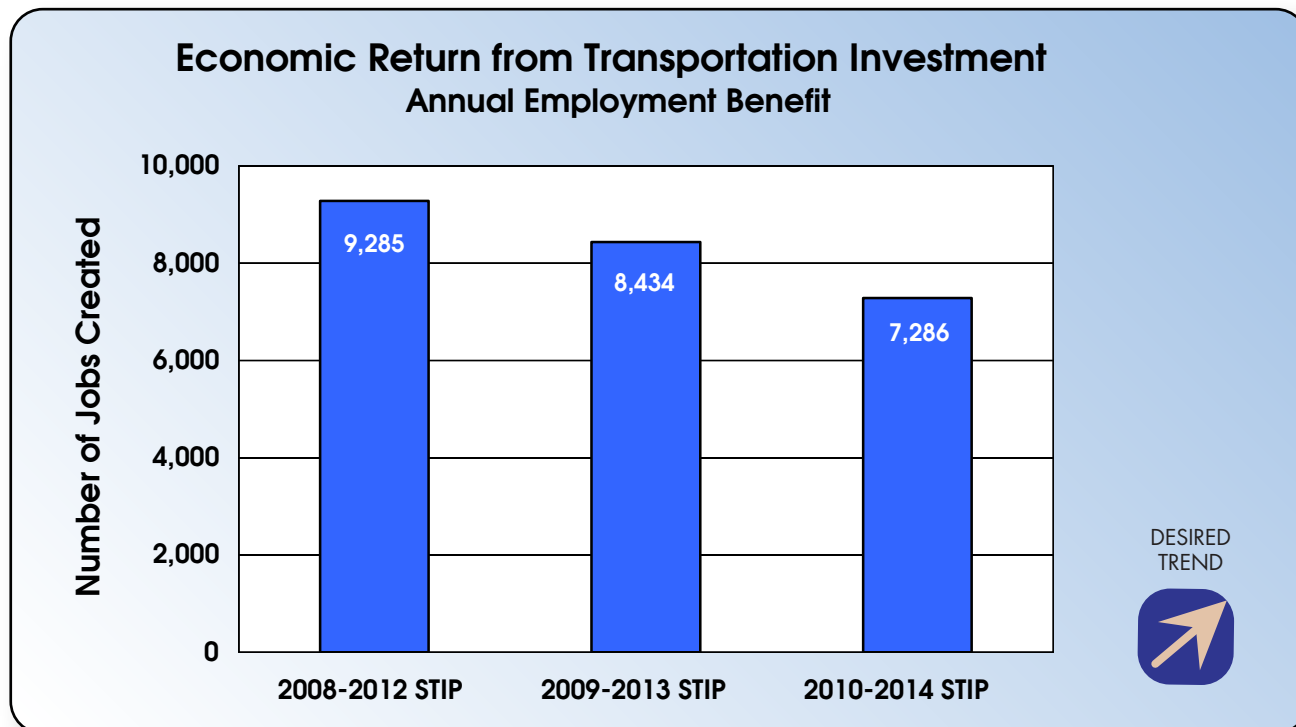
### Measurement and Data Collection:

MoDOT works with the Department of Economic Development to perform economic impact analyses for the state's transportation investments. The analyses are performed using a model called the Regional Economic Modeling, Inc. (REMI). Through these efforts, the department can provide state and regional estimates to demonstrate employment, income and state benefits related to specific projects, corridors and program expenditures. This annual measure is updated each October.

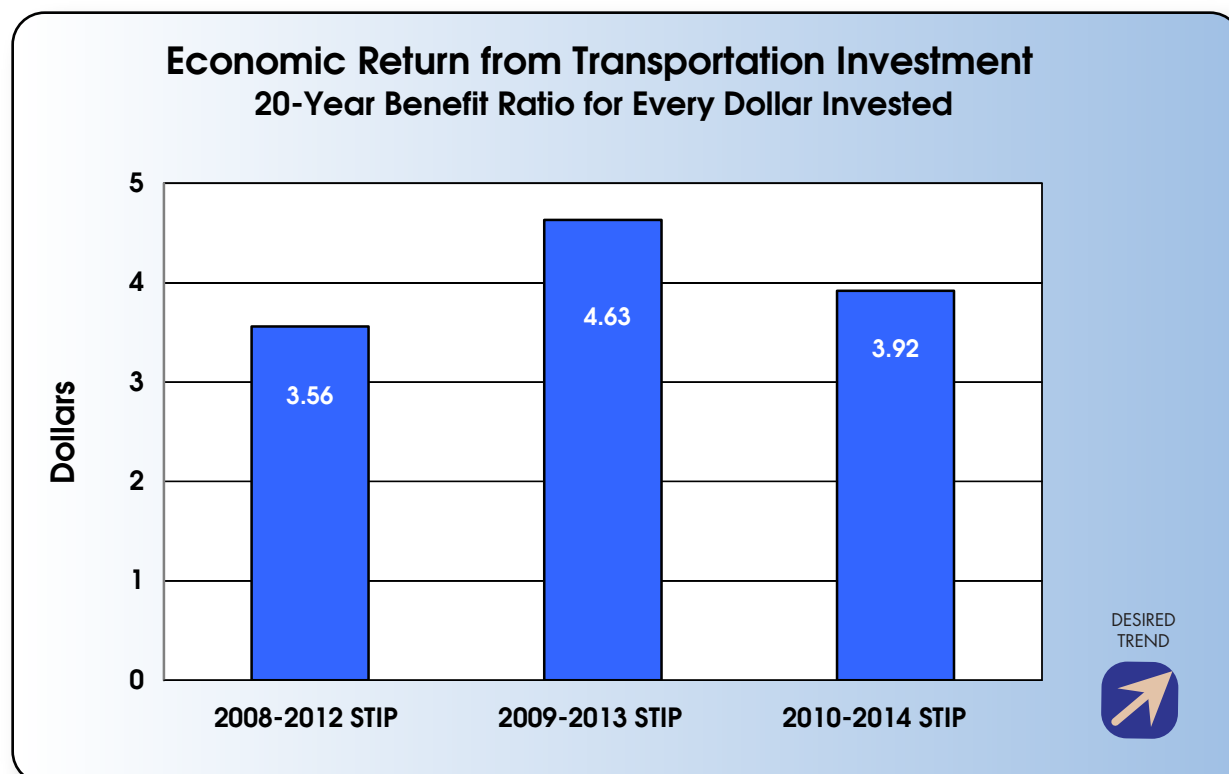
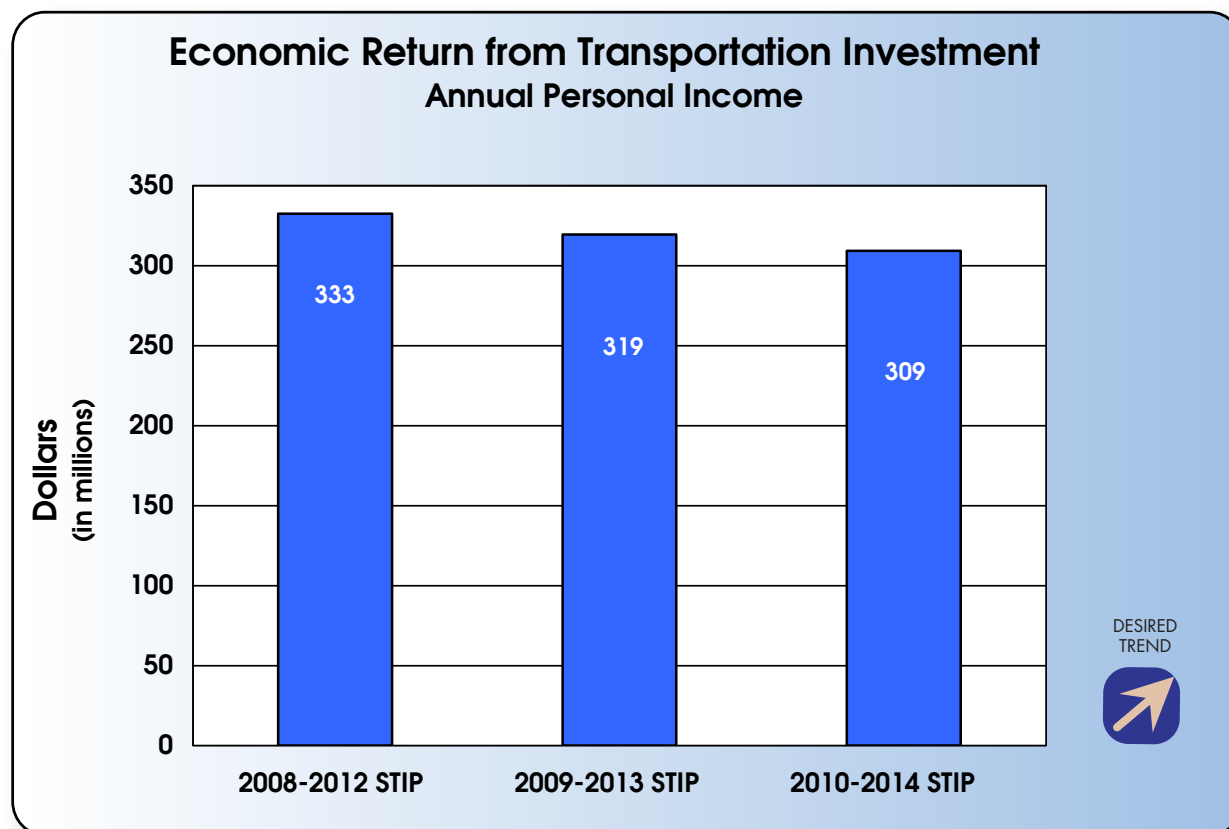
### Improvement Status:

The REMI model results demonstrate the strong link between transportation investment and economic development. An analysis of the Statewide

Transportation Improvement Program (STIP) provides a summary of economic benefits related to transportation investments over the next 20 years. The 2010-2014 STIP will invest more than \$4 billion into highway and bridge projects across the state. On average, these STIP investments will create approximately 7,286 new jobs with an average wage of \$30,474 per job. As a result, average personal income is expected to increase by \$309 million. The 2010-2014 STIP projects will contribute \$810 million of economic output for the state per year totaling \$16.2 billion over the next 20 years. This equates to a \$3.92 return on every \$1 invested in transportation. The 2010-2014 STIP has a lower economic return compared to the 2009-2013 STIP due to decreased transportation investments and a weakened economy. MoDOT continues to work with DED to conduct economic impact analyses for the various transportation investments throughout the state. Additional studies can be found online <http://www.modot.mo.gov/newsandinfo/EconomicImpactAnalysis.htm>.







*(This page is intentionally left blank for duplexing purposes)*







# INNOVATIVE TRANSPORTATION SOLUTIONS

*Tangible Result Driver – Mara Campbell, Organizational Results Director*

MoDOT values innovation. The department empowers employees and seeks input from stakeholders to generate innovative ideas. Collaboration with staff, academia and industry makes unique concepts come to life so MoDOT can serve its customers better, faster and at less expense to the taxpayer.



### Number and percent of research recommendations implemented-8a

**Result Driver:** Mara Campbell, Organizational Results Director

**Measurement Driver:** Bill Stone, Organizational Performance Administrator

#### Purpose of the Measure:

This measure tracks the number of completed research projects, and the percentage of implemented research recommendations. MoDOT realizes the importance of supporting innovation and research and is driven to provide the department with the latest ideas, technologies, and solutions needed to deliver the most efficient, safe, and economical transportation system.

#### Measurement and Data Collection:

Research projects implemented include any new ideas, methods, policies, processes, standards, equipment or tools introduced for the purpose of improving the department's operation, services, or products. For this measure, research projects are categorized into two areas: 1) Information and policy guidance research, and 2) Technical, product-focused research. Both categories are reported as the number of completed activities and percent of recommendations implemented. Examples of information and policy guidance research products include determining the economic impact of highway construction or smoother pavements, or development of freight planning agendas. Technical, product-focused research projects examples include developing passing lane alternatives, or concrete curing specifications.

For these research products, the definition of implemented includes all solutions that have been or are being applied. "Percent of research recommendations implemented" is determined by dividing the number of research projects producing implementable results by the total number of research projects completed during the reporting period.

MoDOT's elevated emphasis on strategically focused research and its implementation should result in better and more economical transportation products and services delivered. Data for this measure is collected and analyzed annually with updates in the July Tracker edition.

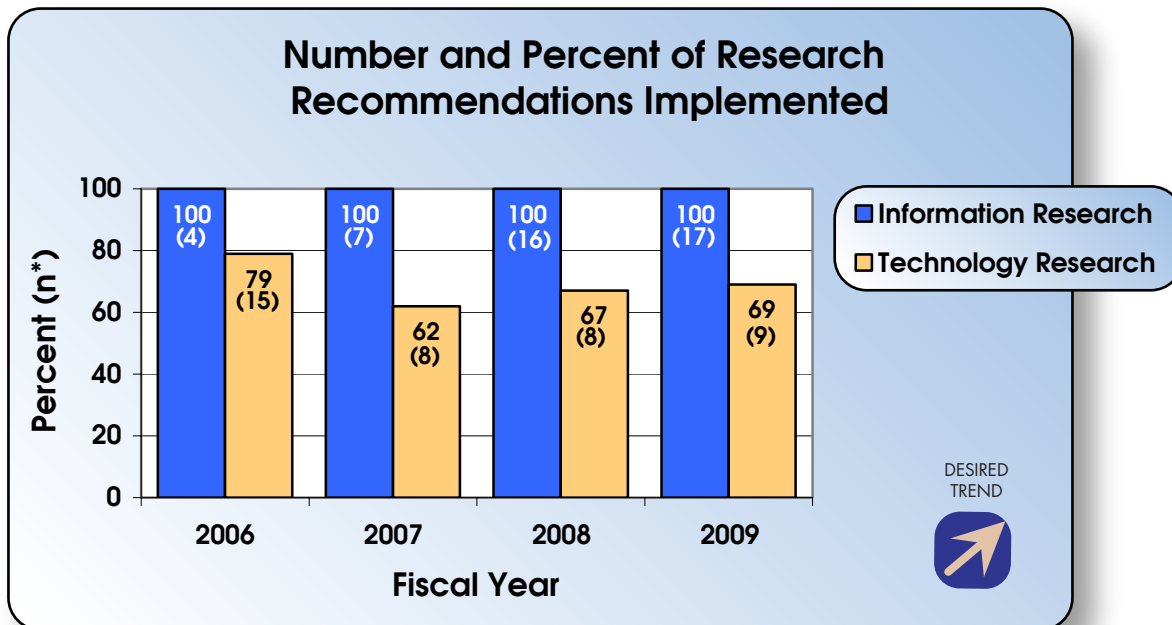
#### Improvement Status:

During fiscal year 2009, MoDOT's research program completed 30 total research projects. Seventeen projects were categorized as information and policy guidance reports and are considered implemented. Thirteen projects were categorized as technical, product-focused reports. Nine of those projects produced implemented results within the department. This represents a 69 percent implementation rate for the technical report recommendations.

Organizational Results has made a more concerted effort to develop research project work plans that have an implementation element included. This is for both in-house and contract research. Request for proposals (RFPs) for contract research are now required to include implementation as one of the deliverables for each project. This focus leads to more usable solutions and better value. While not all research results or solutions can be implemented, MoDOT recognizes the importance and value of conducting a research program driven to make a difference.

Within the last year, Organizational Results has implemented a project-tracking tool, which has brought a better mechanism to track the progress of projects and their implementation.





\*(n) Indicates the number of research recommendations implemented



### Number of external awards received-8b

**Result Driver:** Mara Campbell, Organizational Results Director

**Measurement Driver:** Bill Stone, Organizational Performance Administrator

#### Purpose of the Measure:

This measure tracks the number of external awards received by the department. These awards display the department's dedication and efforts towards efficiency, innovation and quality throughout the organization. This information enables the department to measure progress and encourage further participation in award programs. It also provides opportunities for the department to increase public awareness of department activities.

#### Measurement and Data Collection:

Each district and division office tracks the awards presented to the department by external organizations. This includes all awards presented to individuals, teams, districts, divisions and MoDOT as a whole. Data for this measure is updated quarterly.

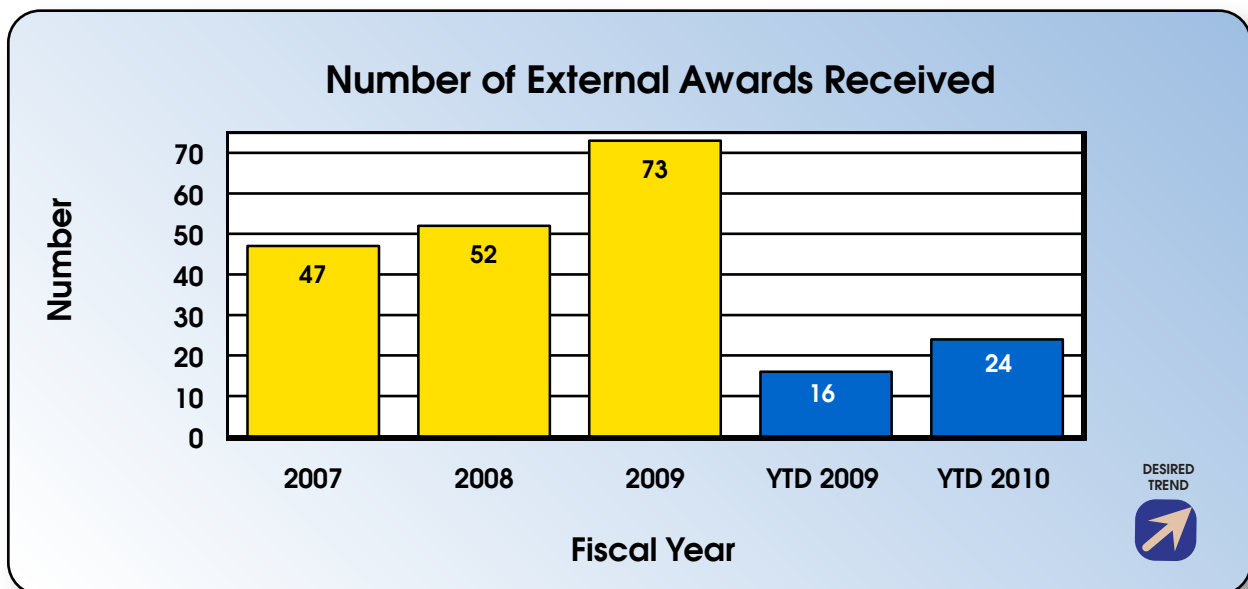
"

#### Improvement Status:

In the second quarter of fiscal year 2010, MoDOT received eighteen awards.

The Governor has honored the Travel Information Map Team and the Virtual Meeting Team with the 2009 Governor's Award for Quality and Productivity. They were two of the four chosen out of more than 30 applications.

MoDOT continues to enter various competitions to have its work judged against the efforts of other organizations.



## Percent of best practices by implementation status-8c

**Result Driver:** Mara Campbell, Organizational Results Director

**Measurement Driver:** Bill Stone, Organizational Performance Administrator

### Purpose of the Measure:

This measure tracks the percent of best practices implemented within MoDOT. Best practices show how MoDOT employees are applying innovation to improve daily operations.

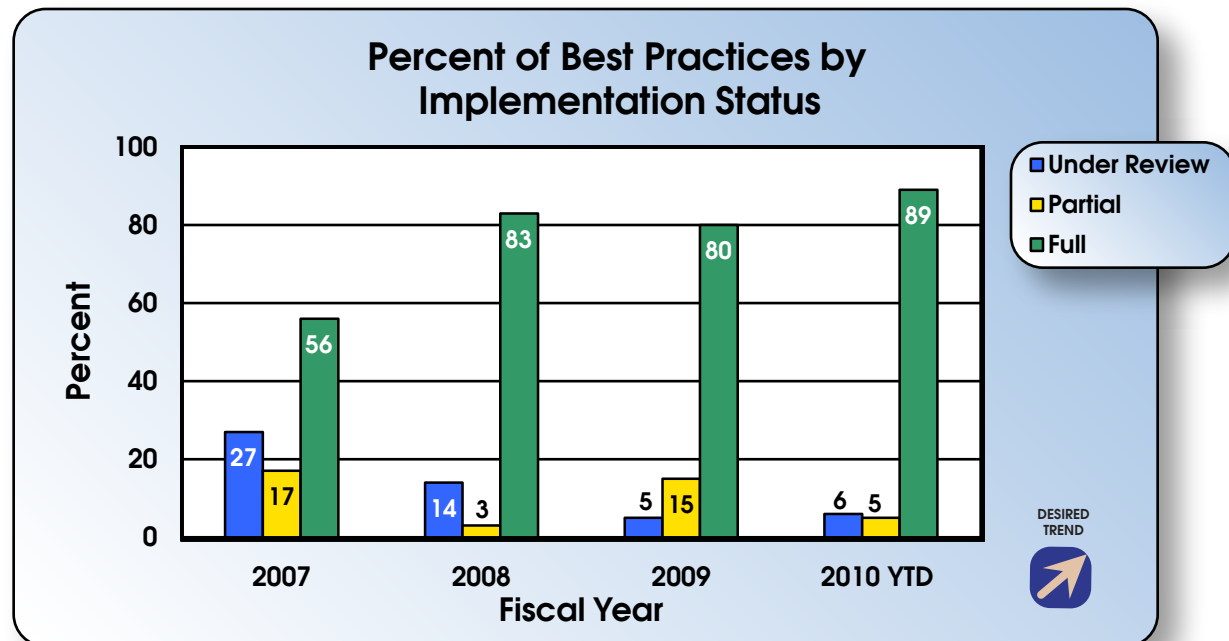
### Measurement and Data Collection:

MoDOT uses a simple five-question submission form for employees to share how they have improved the ways of accomplishing daily work. Submissions are evaluated and verified by managerial and technical staff. Those submissions approved as best practices are shared with MoDOT employees through online and printed publications. Every six months, division and district managers report best practice implementation status. This measure will have updates in the July and January Tracker editions.

### Improvement Status:

In the first six months of fiscal year 2010, MoDOT's Solutions at Work has verified and shared one best

practice with department employees. However, seven best practices from FY 2009 were too recent to be included in the implementation data in July 2009 and will be included in this reporting period. Overall, 89 percent of the best practices have been fully implemented with 5 percent partially implemented and 6 percent still under review. With 94 percent of best practices partially or fully implemented, MoDOT is aggressively taking advantage of best practices. Increased fabrication time during the winter months should push the fully implemented percentage even higher for the July reporting period. The implementation rate for the year to date is 23 percent higher than the mid-year rate for FY 2009. This is a clear indication that implementation of approved best practices has become a priority. This also may be due in part to improved fabrication processes for tool and equipment innovations put in place during 2009.





## Percent of Implementation by Best Practice Fiscal Year 2010 YTD



## Number of dollars saved by increasing MoDOT's productivity-8d

**Result Driver:** Mara Campbell, Organizational Results Director

**Measurement Driver:** Jen Harper, Organizational Performance Engineer

### Purpose of the Measure:

This measure enables MoDOT to assess its productivity by tracking cost savings indicative of practical design, value engineering, Performance Plus, and good engineering judgment.

### Measurement and Data Collection:

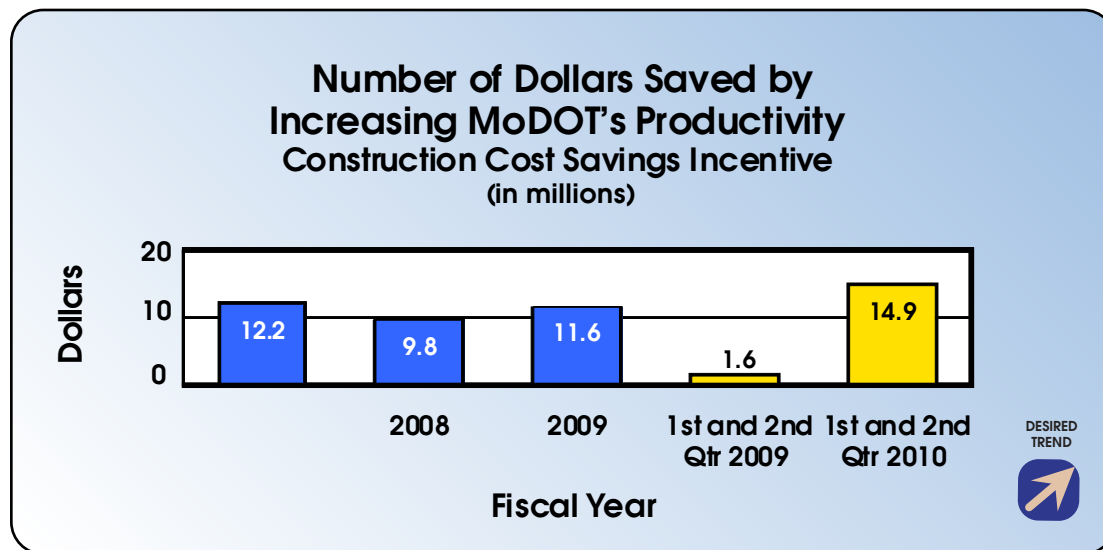
The cost-saving methods used by MoDOT are so broad that this measure focuses on savings measured through the Performance Plus program. The Construction Cost Savings and the Project Scoping and Estimating incentives are verified quarterly, while the Injury Reduction incentive was verified on a semi-annual basis but has been discontinued. The number of dollars saved is calculated for each of the incentives. The amount paid out to employees is no longer subtracted from the reported savings in order to report the data in a timely manner. Note that the Construction Cost Savings incentive is now calculated in the same manner as the Project Scoping

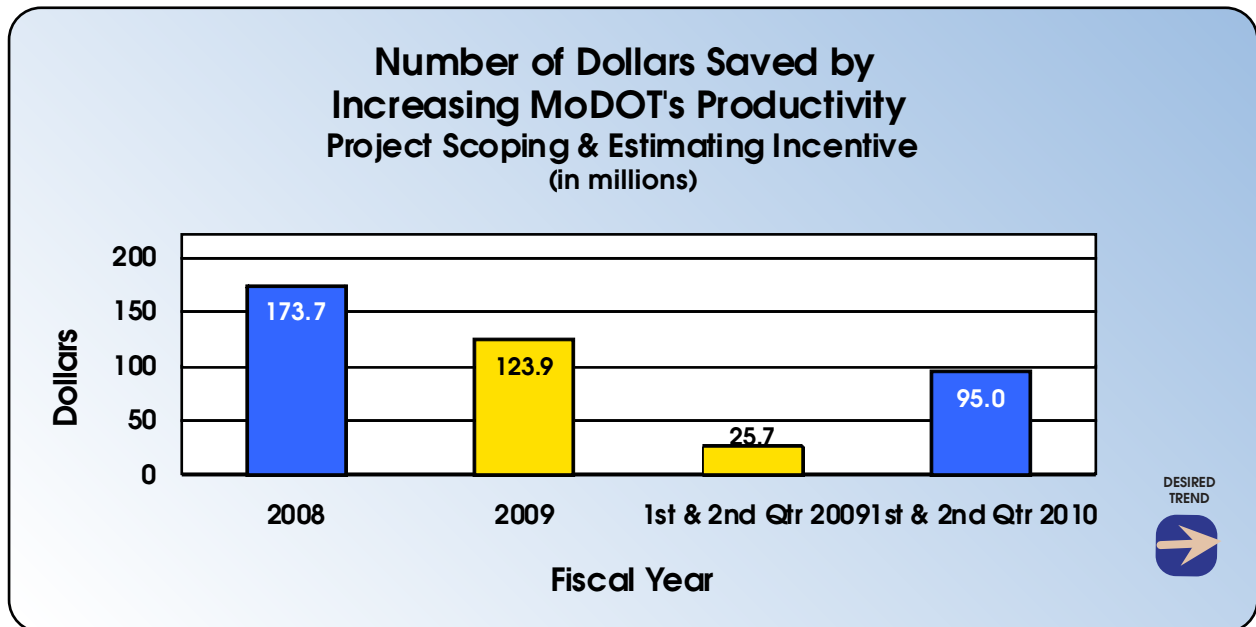
and Estimating incentive, that is, calculations are based on all of the project offices/districts whether or not they qualified. The historical data was recalculated to reflect these changes. Savings are reported in the same quarter the data is measured. For the Construction Cost Savings and Project Estimating and Scoping incentives, the measurement data reflects October to December FY 2010.

### Improvement Status:

For the second quarter of fiscal year 2010, MoDOT saved \$9.8 million through the Construction Cost Savings incentive.

In the second quarter of fiscal year 2010, \$52.0 million was saved through the Project Scoping and Estimating incentive.





Note: The desired trend in the Project Scoping and Estimating Incentive is to keep the variance between the STIP estimate and low bid amount to 0 percent.



*(This page is intentionally left blank for duplexing purposes)*







# FAST PROJECTS THAT ARE OF GREAT VALUE

*Tangible Result Driver – Dave Nichols, Director of Program Delivery*

MoDOT customers expect that transportation projects be completed quickly and provide major improvements for travelers. MoDOT will honor project commitments because it believes in integrity.



### Percent of programmed project cost as compared to final project cost-9a

**Result Driver:** Dave Nichols, Director of Program Delivery

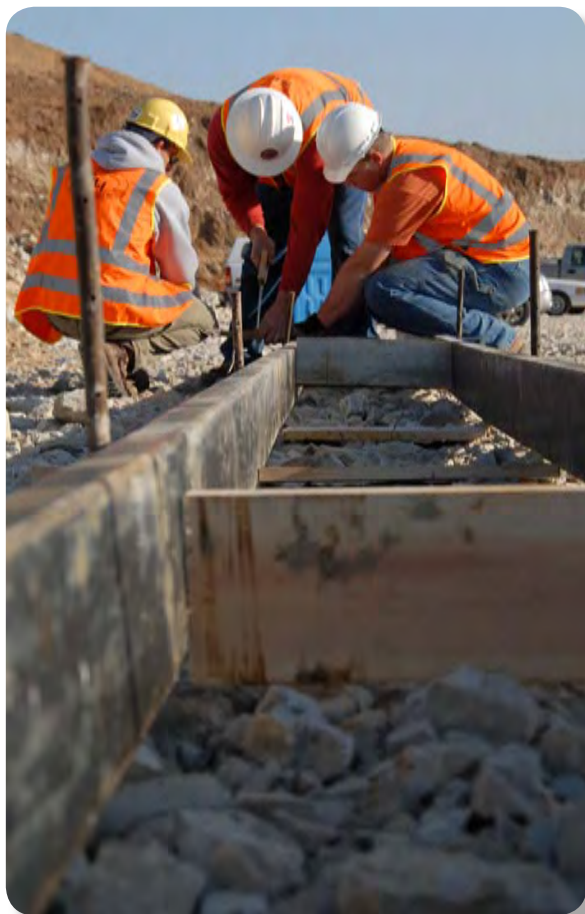
**Measurement Driver:** Renate Wilkinson, Planning and Programming Engineer

#### **Purpose of the Measure:**

This measure determines how close MoDOT's total project completion costs are to the programmed costs. The programmed cost is considered the project budget.

#### **Measurement and Data Collection:**

MoDOT determines the completed project costs and compares them to the programmed costs. The completed project costs are reported during the fiscal year in which the project is completed.



Project costs include design, right of way purchases, utilities, construction, inspection and other miscellaneous costs. The programmed cost is based on the amount included in the most recently approved Statewide Transportation Improvement Program. Completed costs include actual expenditures. The costs do not include those that might result from any legal claims, which are rare occurrences, regarding the projects after they are completed. Positive numbers indicate the final (completed) cost was higher than the programmed cost.

This is an annual measure updated each quarter. In November of each year, this data is provided to the Missouri Legislature through the Report to the Joint Committee on Transportation Oversight.

#### **Improvement Status:**

As of December 31, 2009, for fiscal year 2010, a total of 187 projects were completed at a cost of \$645 million. This represents a deviation of -3.3 percent or \$22 million less than the programmed cost of \$667 million.

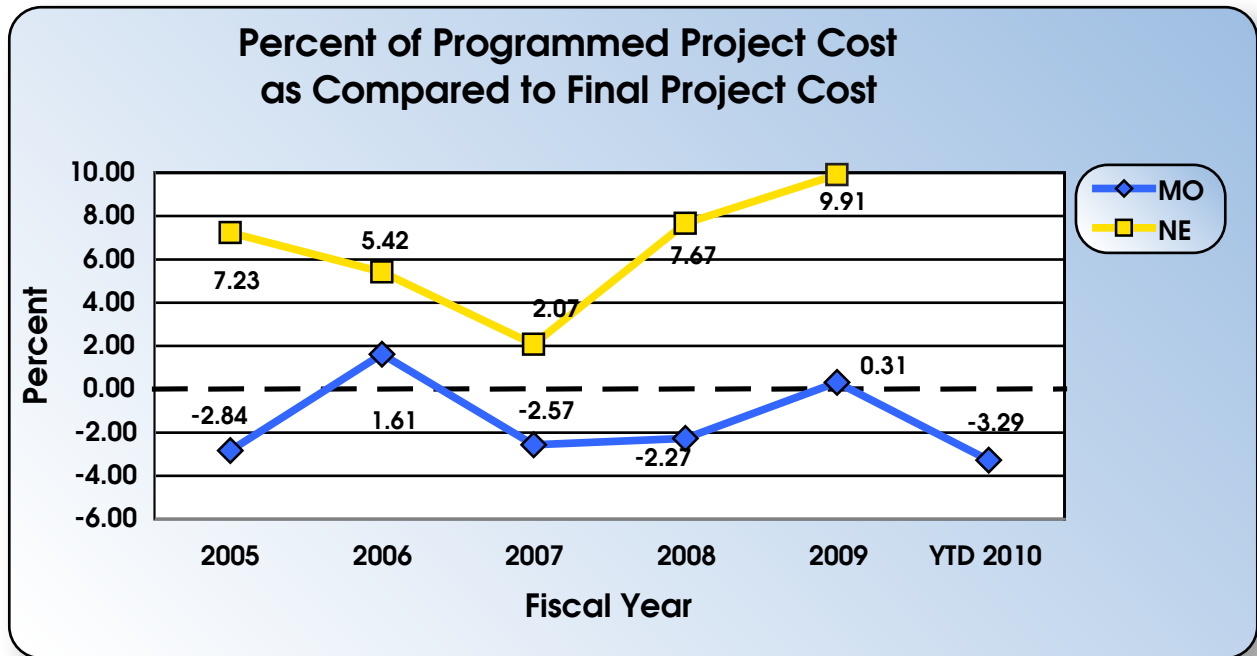
In fiscal year 2009, a total of 411 projects were completed at a cost of \$1.593 billion. This represents a deviation of 0.31 percent or \$5 million more than the programmed cost of \$1.588 billion.

District construction budgets are adjusted based on variation from programmed costs. The ideal status is no deviation in the programmed vs. final project cost, or 0 percent. For projects completed in the five-year period from 2005 to 2009, final costs of \$6.321 billion were within 1.02 percent of programmed costs, or \$64.8 million less than the programmed cost of \$6.385 billion.

While a number of states track construction costs, few provide data for total project costs. Fewer still compare programmed total project costs to final total project cost. The following graph shows how MoDOT performance compares with neighboring Nebraska. In 2006, both states were within 4 percent of each other. In other years, it varied close to 10 percent. Data for Nebraska is updated annually.



## FAST PROJECTS THAT ARE OF GREAT VALUE



Positive numbers indicate the final (completed) cost was higher than the programmed cost.  
Data from Nebraska Department of Roads, one-year schedule of highway improvement projects.





### Average number of years it takes to go from the programmed commitment in the Statewide Transportation Improvement Program to construction completion-9b

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Machele Watkins, Transportation Planning Director

#### Purpose of the Measure:

This measure monitors how quickly projects go from the programmed commitment to fiscal closure of a construction project.

#### Measurement and Data Collection:

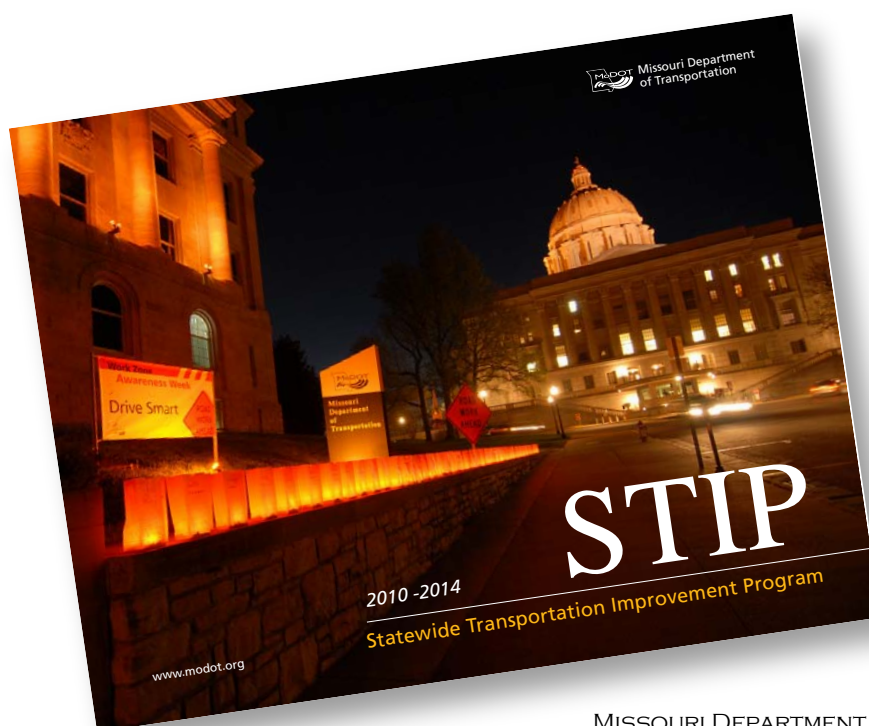
MoDOT compares how long it takes from when the project is added to the Statewide Transportation Improvement Program (STIP) to when the project is completed. Project completion is defined as fiscal closure, which happens after the visible construction work has been completed. Data is categorized by the type of work and distinguishes between design and construction stages. This is an annual measure and data is updated in October.

In general, resurfacing and safety projects take the least amount of time to develop and complete, around two to three years. New or improved bridge projects take more time, around four to five years. New or expanded highways and major bridges take yet more time, from four to eight years to develop and complete.

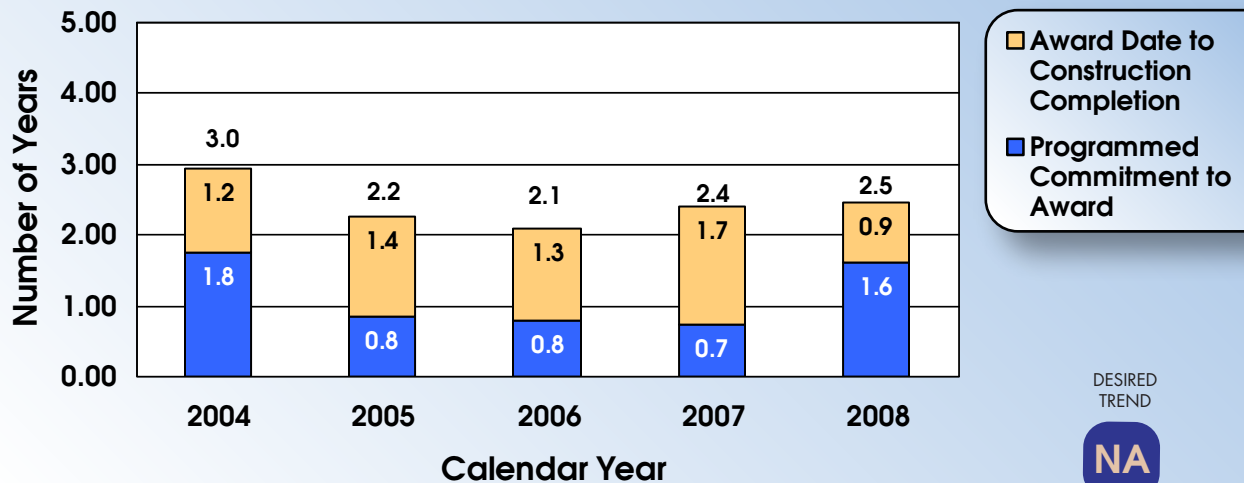
#### Improvement Status:

From 2007 to 2008, design time for resurfacing projects increased to 1.6 years. Design time for safety projects decreased slightly to 1.1 years. Design time for new or improved bridges also decreased slightly to 2.7 years. The design time average for new or expanded highways decreased to 2.7 years. The design time for major bridges increased to 1.9 years. It should be noted, though, that data samples for major bridges are usually small, which allows for one to two projects to affect the averages that are reported.

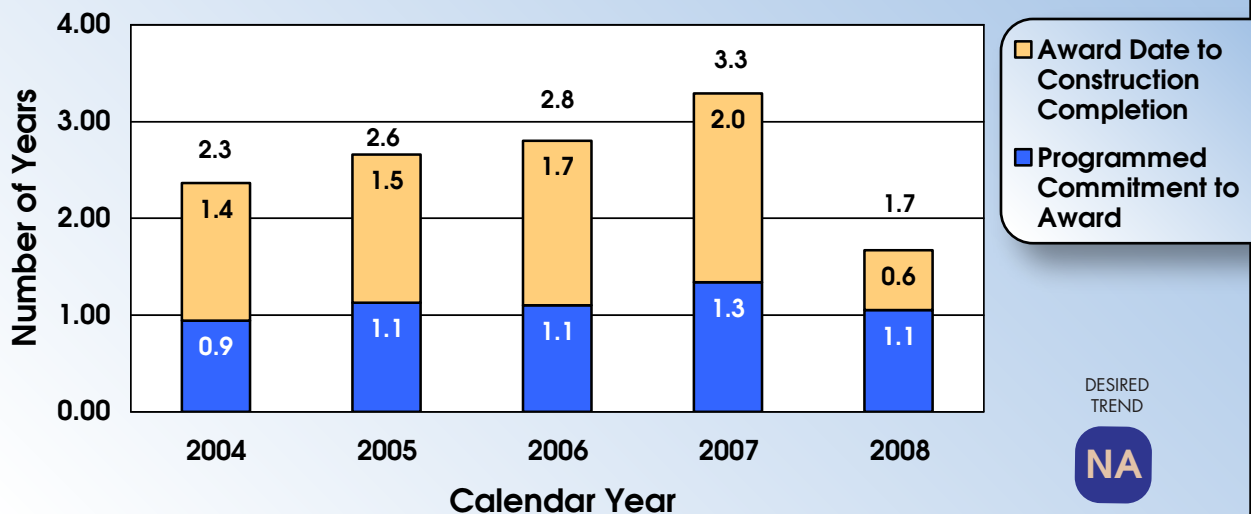
Construction times from 2007 to 2008 decreased by about half for all worktype categories. This can be partially attributed to the fact that the method of calculating construction time has changed. Prior to 2008 the end date of construction was determined by using the date projects were fiscally closed, whereas now the date of substantial work completion is used. The date of substantial work completion more closely corresponds to what the traveling public would perceive as completion of construction.



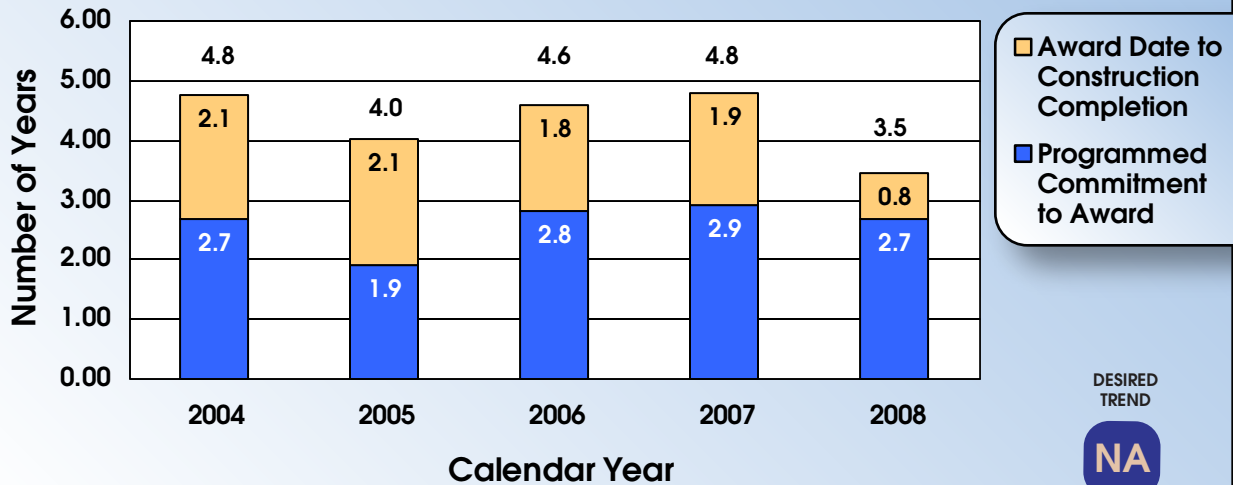
**Average Number of Years it Takes to Go from the  
Programmed Commitment in the STIP  
to Construction Completion  
Resurfacing Projects**



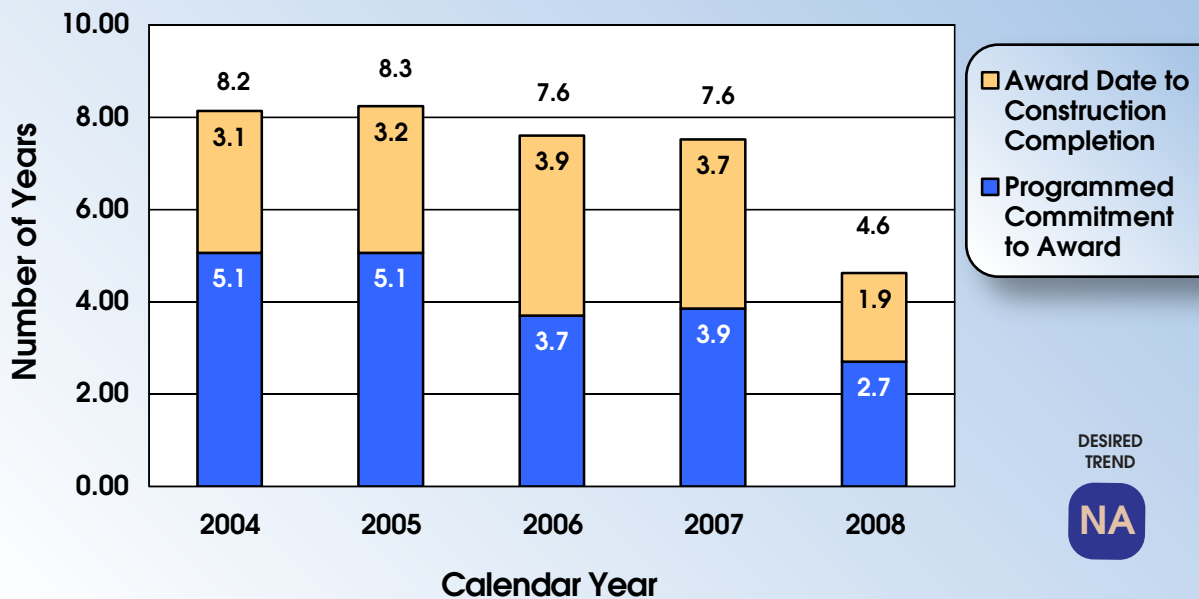
**Average Number of Years it Takes to Go from the  
Programmed Commitment in the STIP  
to Construction Completion  
Safety Projects**

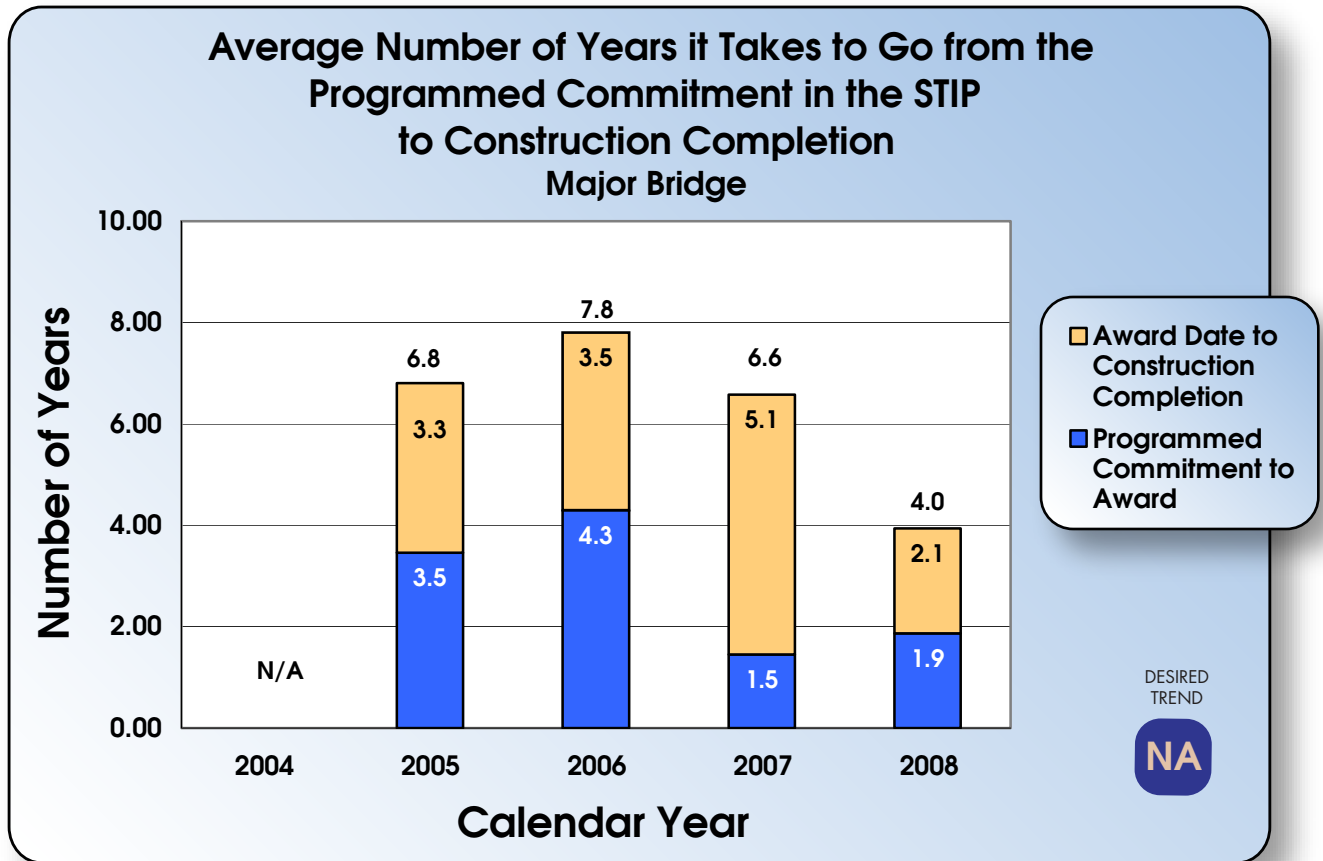


**Average Number of Years it Takes to Go from the  
Programmed Commitment in the STIP  
to Construction Completion  
New/Improved Bridge**



**Average Number of Years it Takes to Go from the  
Programmed Commitment in the STIP  
to Construction Completion  
New/Expanded Highway**







## FAST PROJECTS THAT ARE OF GREAT VALUE

### Percent of projects completed within programmed amount-9c

**Results Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Dave Ahlvers, State Construction & Materials Engineer

#### Purpose of the Measure:

The measure tracks the percentage of projects completed within the programmed amount. It includes separate categories for projects over and under one million dollars.

#### Measurement and Data Collection:

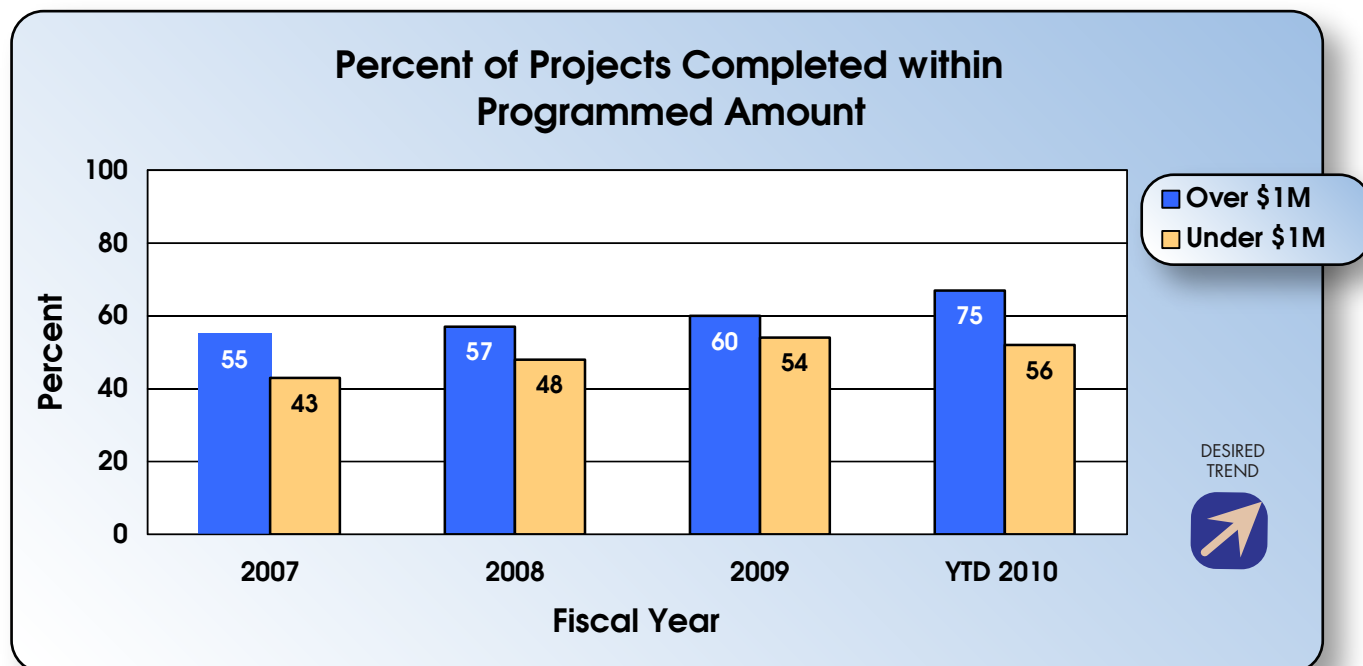
The completed project cost is compared to the estimated cost for each project. The percentage of projects completed within the estimated cost is gathered from across the state.

Project costs include design, right-of-way purchases, utilities, construction payments, inspection and other miscellaneous costs.

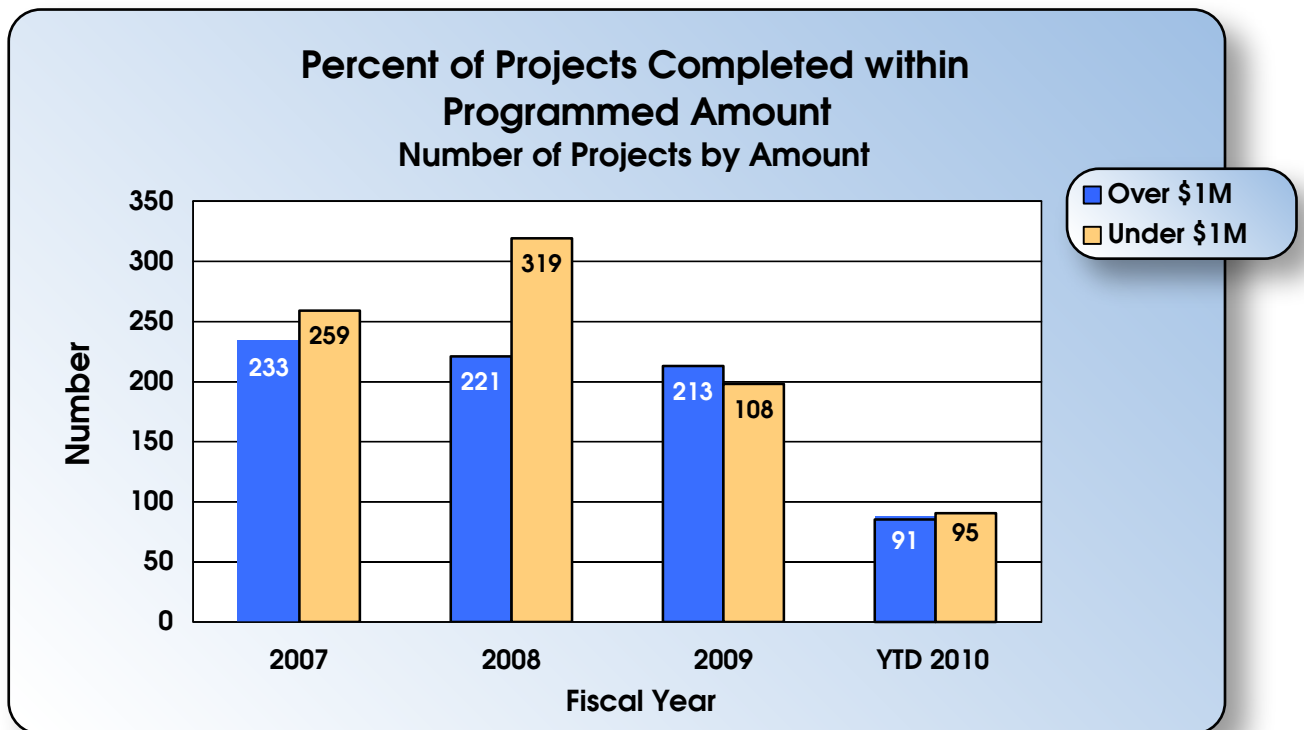
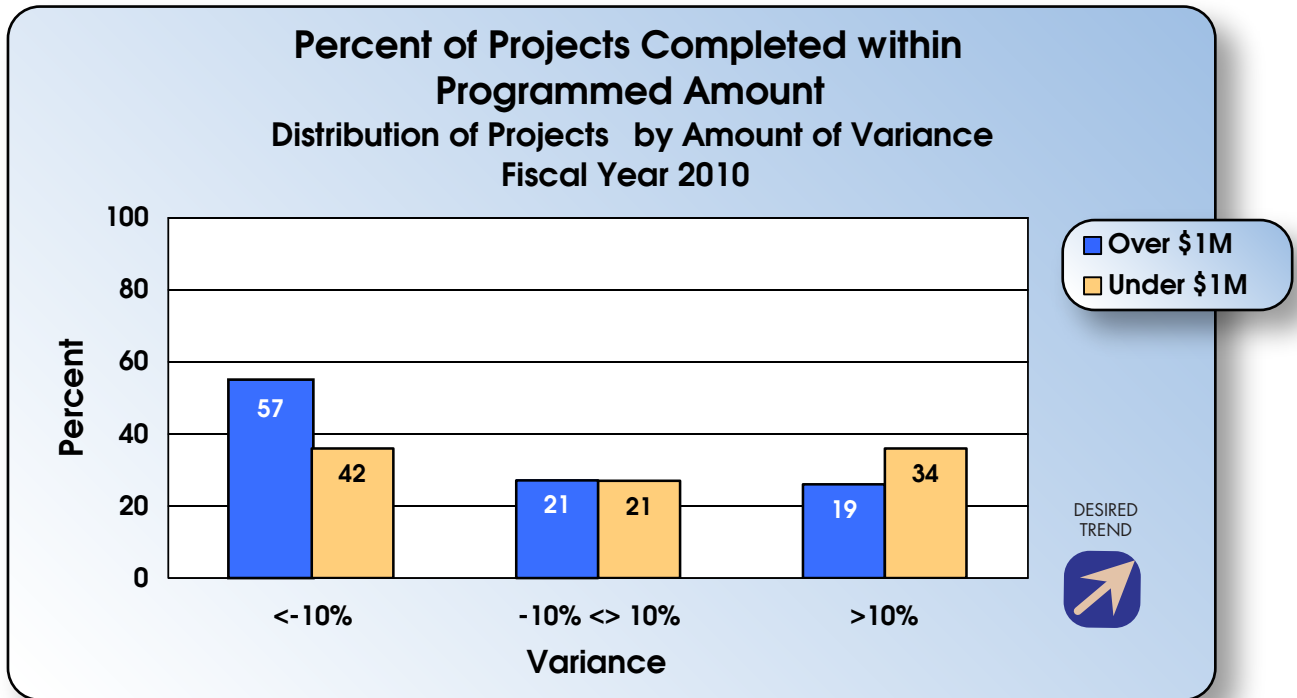
This is an annual measure updated each quarter.

#### Improvement Status:

MoDOT desires that all projects be completed within the programmed amount, thereby allowing the greatest number of projects to be built with the funding available. MoDOT's data indicates that there is a great deal of deviation among individual projects with half over and half under budget. In fiscal year 2010, 67 percent of projects programmed over \$1 million were completed within the budgeted amount, while 52 percent of projects under \$1 million came in at or below budget. Emphasis has been placed on scoping projects and developing estimates that represent the true cost of project delivery. MoDOT is striving to deliver quality projects cheaper by using practical design and by encouraging the use of value engineering.



## FAST PROJECTS THAT ARE OF GREAT VALUE



## FAST PROJECTS THAT ARE OF GREAT VALUE

### Percent of projects completed on time - 9d

**Results Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Dave Ahlvers, State Construction & Materials Engineer

#### Purpose of the Measure:

This measure tracks the percentage of projects completed by the commitment date established in the contract. Adjustments to the completion date are made when additional work is required or for unusual weather occurrences. It indicates MoDOT's ability to complete projects by the agreed upon date.

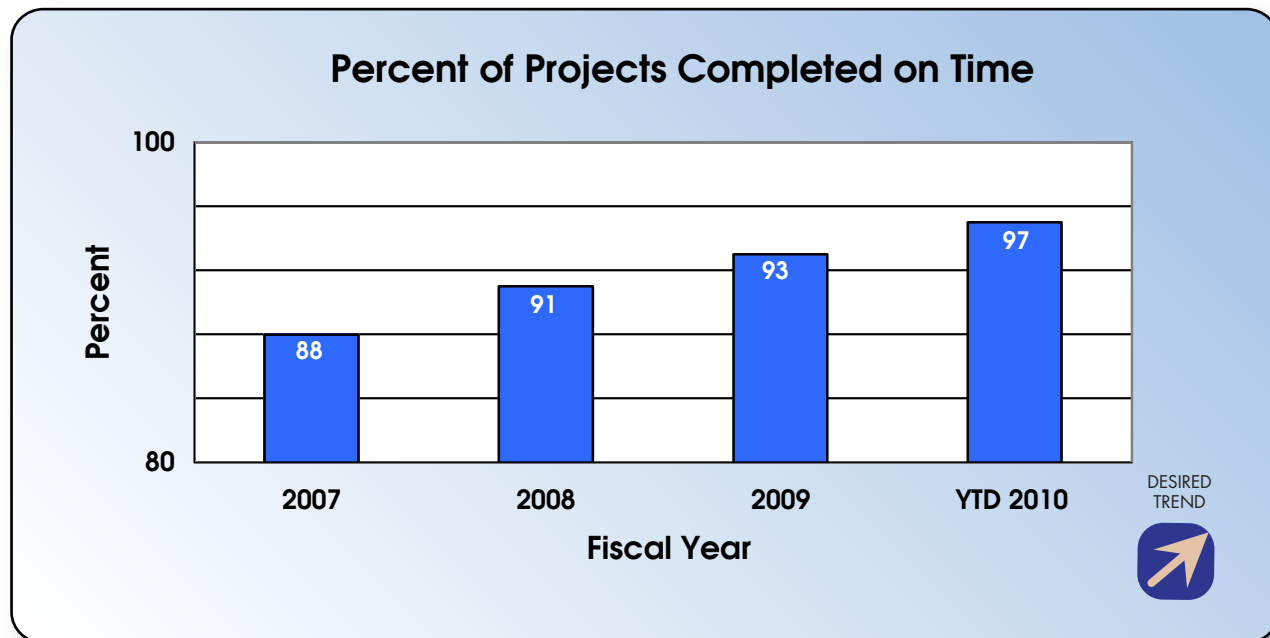
#### Measurement and Data Collection:

The project manager will establish project completion dates for each project. They are documented in MoDOT's SiteManager and STIP databases, and become part of the Plans, Specifications & Estimates submittal. The actual completion date is documented by the resident engineer and placed in MoDOT's project management system.

This is an annual measure updated each quarter.

#### Improvement Status:

The results indicate that 97 percent of projects completed in fiscal year 2010 have been on time. MoDOT has focused on reducing the number of days available for construction in order to reduce congestion and inconvenience to the traveling public, while stressing the importance of completing projects on time. To achieve timely completion of improvement projects, an emphasis has been placed on reviewing construction schedules and assessing liquidated damages.



## Percent of change for finalized contracts-9e

**Results Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Dave Ahlvers, State Construction & Materials Engineer

### Purpose of the Measure:

The measure tracks the percentage difference of total construction payouts to the original contract award amounts. This indicates how many changes are made on projects after they are awarded to the contractor.

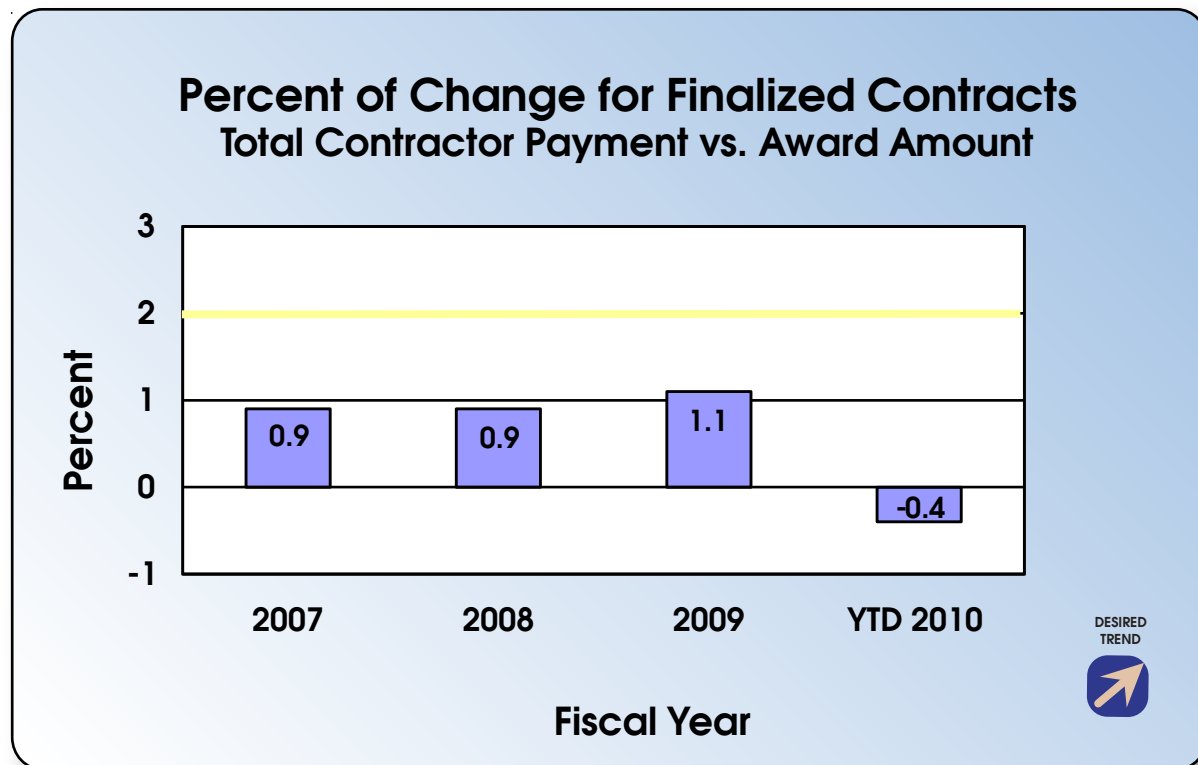
### Measurement and Data Collection:

Contractor payments are generated through MoDOT's SiteManager database and processed in the financial management system for payment. Change orders document the underrun/overrun of the original contract.

### Improvements Status:

MoDOT's performance of -0.4 percent in fiscal year 2010 is below the target of 2 percent. The overall improvement is a result of a strong emphasis placed on constructing projects within budget, the use of practical design and value engineering. By limiting overruns on contracts, MoDOT can deliver more projects, leading to an overall improvement of the entire highway system. The Performance Plus employee incentive program has placed additional emphasis on completion of projects within budget.

This is an annual measure updated each quarter.





## FAST PROJECTS THAT ARE OF GREAT VALUE

### Average construction cost per day by contract type - 9f

**Results Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Dave Ahlvers, State Construction & Materials Engineer

#### Purpose of the Measure:

This measure tracks the cost per day for project completion to determine the impact to the traveling public, enabling MoDOT to better manage project completion needs.

#### Measurement and Data Collection:

This information is gathered by extracting the actual time used for construction from the summary of days used in the SiteManager database and dividing it by the total costs of the project.

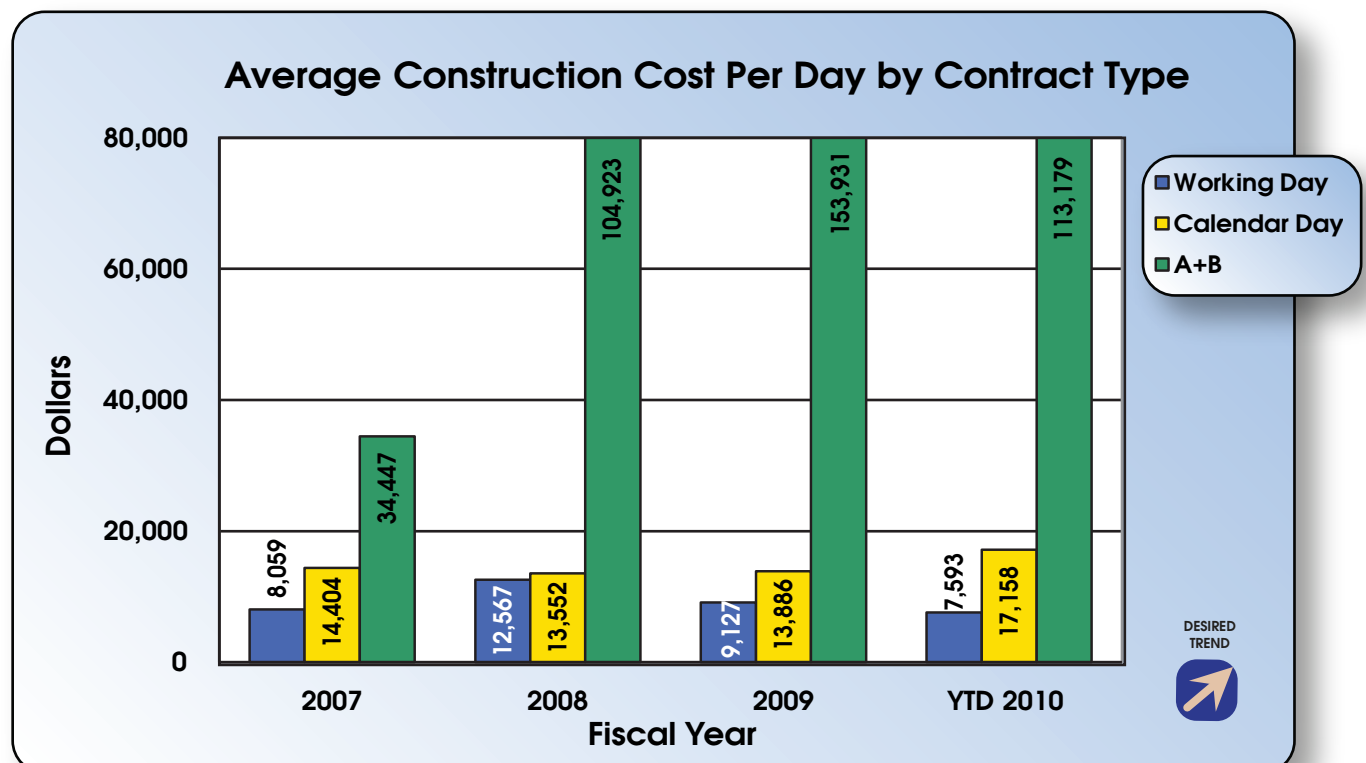
The measurement groups construction contracts into three categories:

- **WD** working day contracts
- **CD** calendar day contracts and;
- **A + B** or innovative contracts that provide incentive/disincentives to the contractor for early completion.

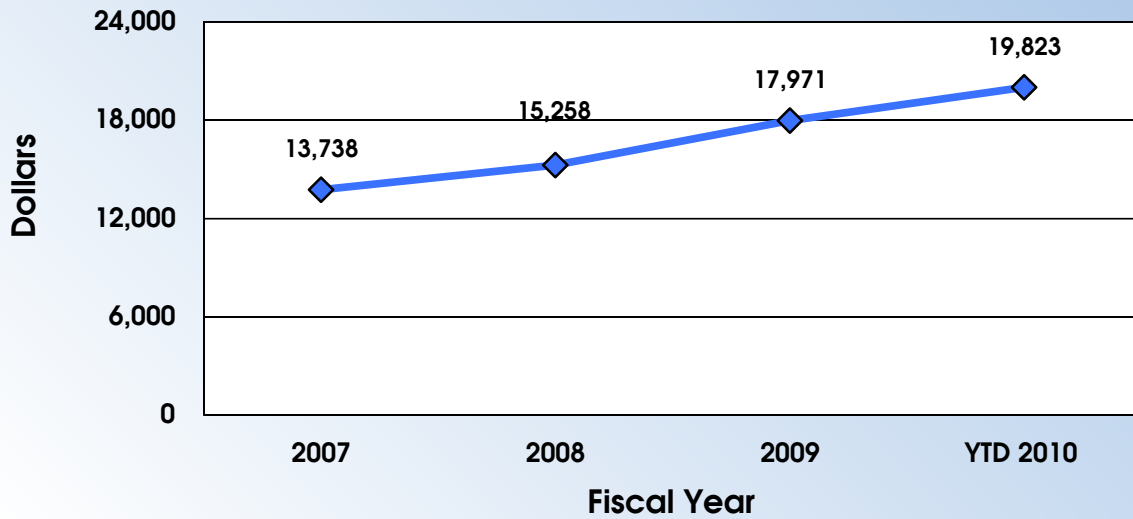
This is an annual measure updated each quarter.

#### Improvement Status:

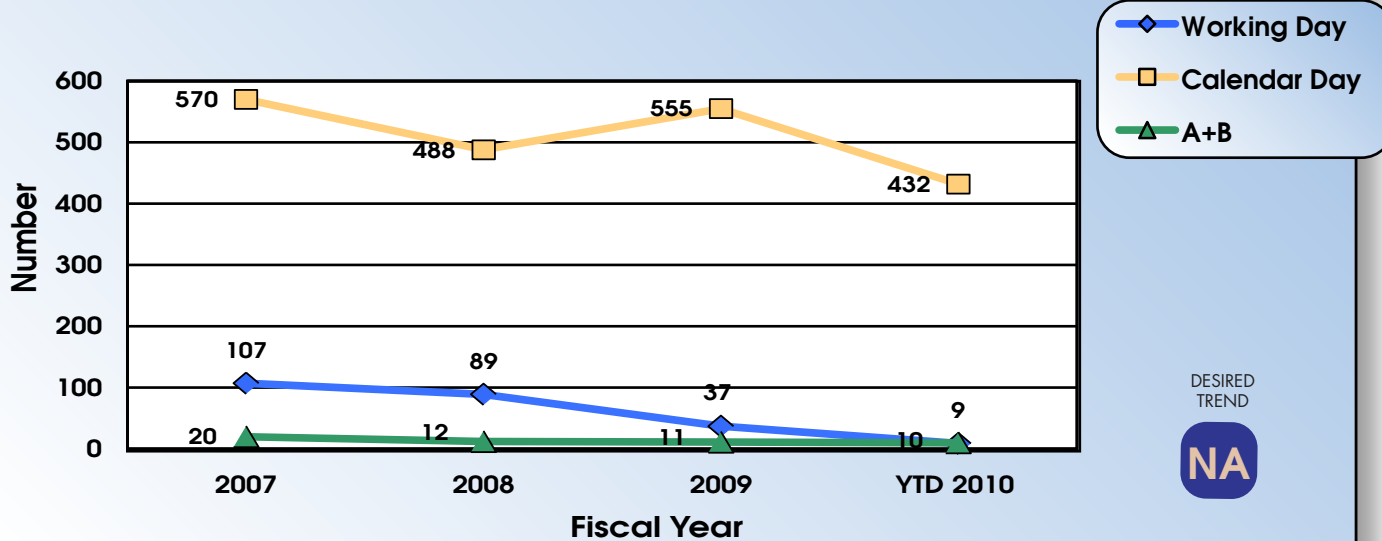
The greater use of A+B and calendar-day contracts resulted in a larger amount paid per calendar day in the first two quarters of fiscal year 2010. The I-64 and kcICON design-build projects are included in the A+B category. Total payments for these two projects were over \$121 million during this period. MoDOT's strategy of utilizing innovative contracting techniques and design-build projects has resulted in faster contract completion and fewer delays to the traveling public. Contract types are reviewed to make a determination of the most effective use of resources for timely completion of projects.



**Average Construction Cost Per Day by Contract Type**  
All Contract Types



**Average Construction Cost Per Day by Contract Type**  
All Contract Types



## FAST PROJECTS THAT ARE OF GREAT VALUE

### Unit cost of construction expenditures -9g

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Kenneth Voss, Bidding and Contract Services Engineer

#### Purpose of the Measure:

This measure tracks how MoDOT projects provide great value by comparing the cost of major items of work for MoDOT projects to other state DOTs. MoDOT customers should be able to gain an understanding of what it costs for a DOT to install an item of work. While value should not be defined as MoDOT prices per unit being the lowest as compared to other DOTs, prices can be compared keeping in mind that labor rates, material availability and general project conditions such as urban vs. rural will vary from state to state.

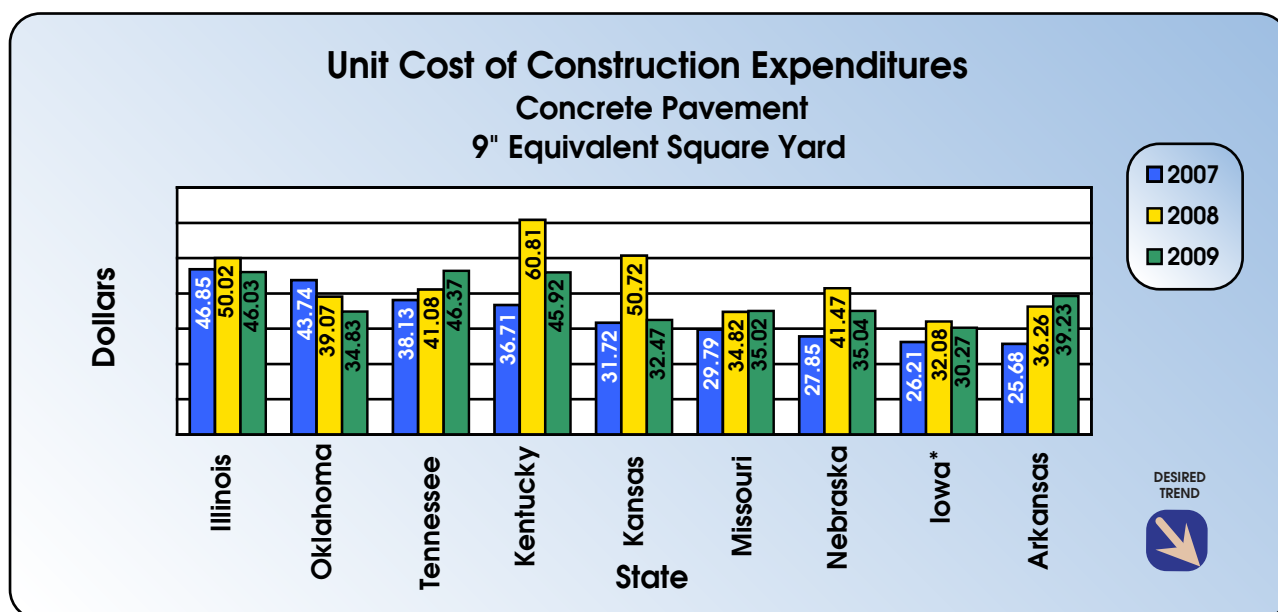
#### Measurement and Data Collection:

Value in this measure has simply been related back to dollars per unit of measure. MoDOT staff categorizes raw data from an outside vendor for the unit cost from surrounding states. In the past, FHWA has been the source for determining the “lowest in the U.S.” FHWA is currently retooling its method of determining state price indexes and is expected to have this complete in Spring 2010. This is a success for DOTs since FHWA’s old method produced

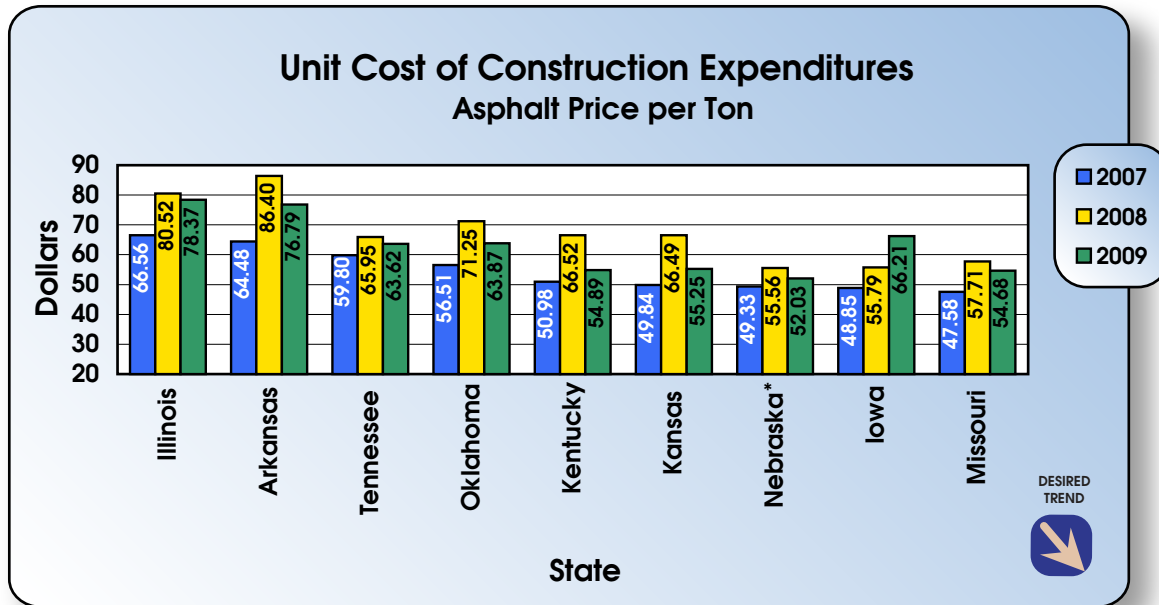
numerous pieces of erroneous data. This is an annual measure updated each January.

#### Improvement Status:

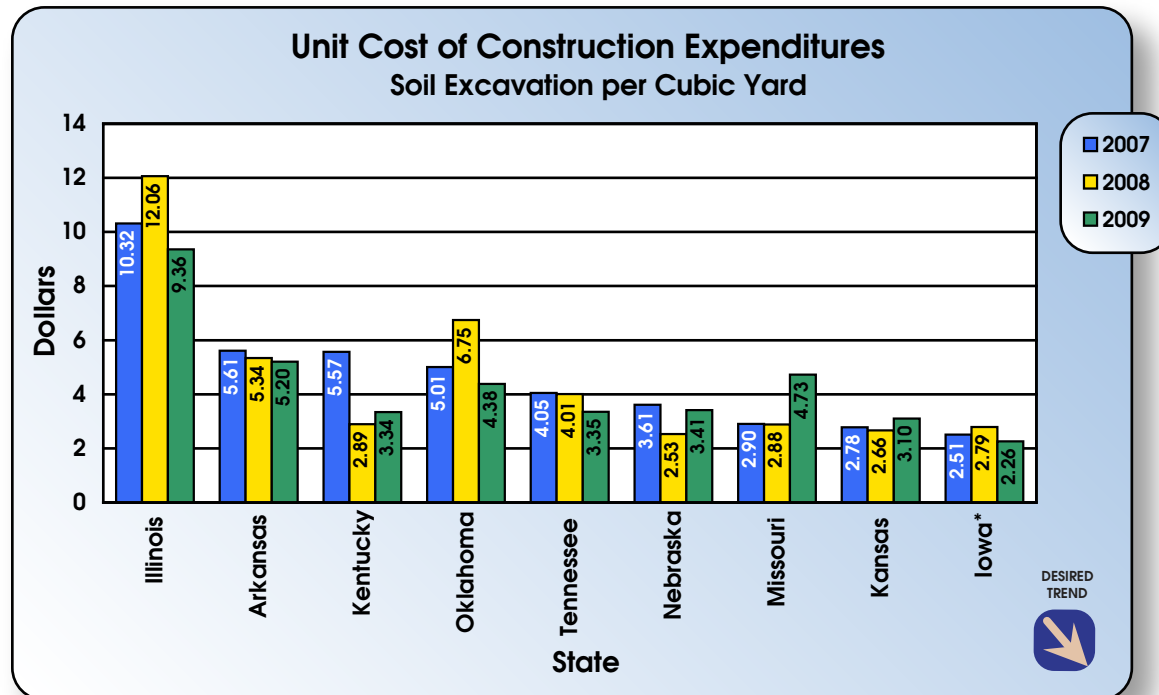
Excellent competition in the past year has enabled MoDOT to realize a minimal 5 percent increase in unit prices for bridge construction – the lowest percentage increase in this area among Missouri’s surrounding states. MoDOT was also below the surrounding states average unit prices for concrete and asphalt paving. The 64 percent increase in unit prices for soil excavation is due to an increased number of urban grading projects. In the past six months, MoDOT had an average of more than 6.1 bidders per proposal as compared to fewer than 3.5 bidders per proposal just a couple of years ago. Projects less than \$500k are receiving an average of more than seven bids per proposal which can be attributed to smaller programs in cities and counties. MoDOT has also expanded the use of alternate technical concepts that give bidders and designers more flexibility to deliver the best value for every dollar spent.



\* Lowest for surrounding states



\* Lowest for surrounding states



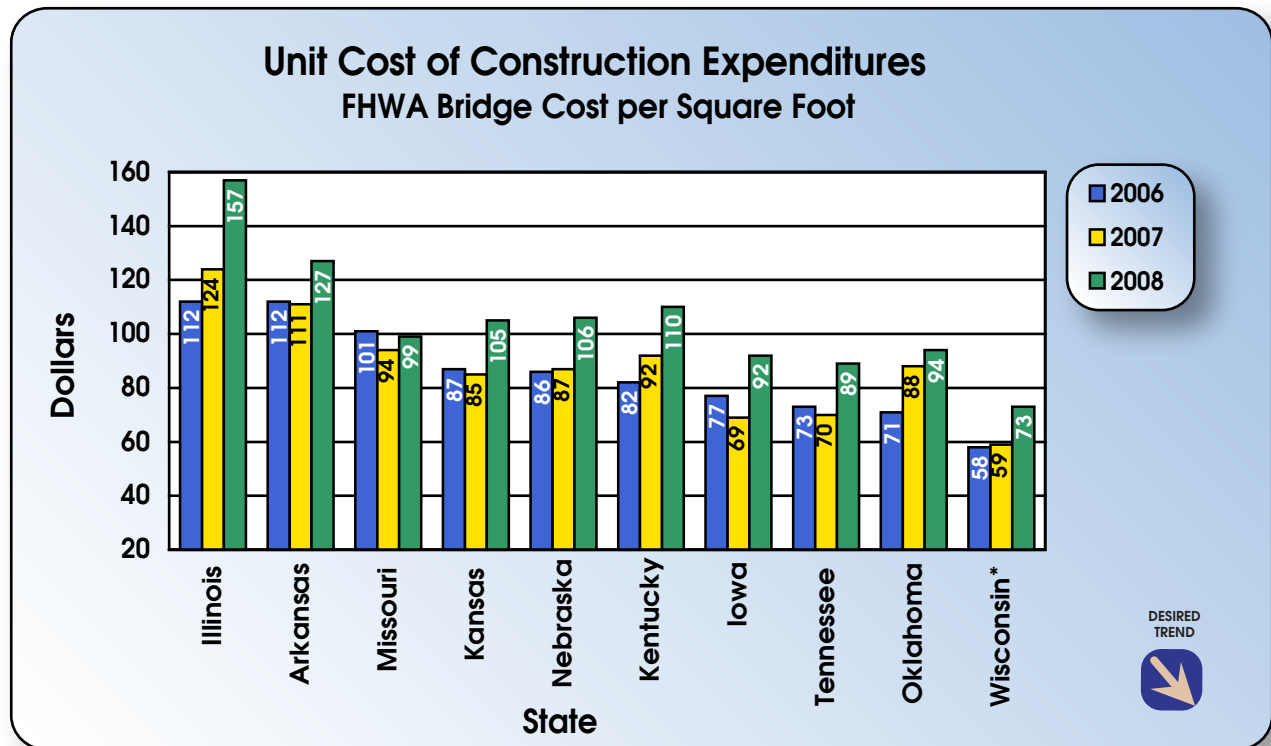
\* Lowest for surrounding states

Footnote for the charts above:

Source data for states other than Missouri from Oman Systems Bid Tabs Professional latest data available as of January 2010. Items include common excavation items paid for by the cubic yard. Missouri data from MoDOT bid history.



## FAST PROJECTS THAT ARE OF GREAT VALUE



\*Lowest in U.S.

Source data from FHWA memo "Bridge Construction Unit Cost" dated January 2010.



### Annual dollar amount saved by implementing value engineering-9h

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Joe Jones, Engineering Policy Administrator

#### Purpose of the Measure:

This measure tracks the amount of money MoDOT saves by implementing value engineering proposals.

#### Measurement and Data Collection:

Value Engineering has saved MoDOT over \$500 million since 1988. VE achieves savings at the design phase and at the construction phase of a project. VE utilizes a team approach to refine the purpose and need and then develop innovative and creative ideas, which result in project savings while optimizing project performance. The VE team is usually independent from the project core team and includes participants from various disciplines both from within and outside of MoDOT. VE studies are done on projects at all stages of development, from the concept stage to final design and during construction.

Traditionally, VE studies during the design phase of a project were a five-day formal event that required a tremendous amount of organization and facilitation. As a result, VE studies were only done on the significant few projects where large savings could be realized. In an effort to increase the number of VE studies being done and thus increase the potential for cost savings, the format of the study has been revised to be more flexible. VE studies now match the size and needs of the project, ranging from two hours to five days. This change has increased the number of VE studies being done during the design phase of the projects.

VE savings are reported annually to the Federal Highway Administration by each state and the

national results are available for Federal Fiscal Year 2008. For design phase savings, Florida is the best in the nation showing \$480 million implemented. For construction phase savings, Rhode Island is the best in the nation showing \$15 million implemented. When compared to states surrounding Missouri, Kentucky reported \$34 million saved during design and Illinois reported \$5.98 million saved during construction. Direct comparison to other states is challenging because of differences in construction program size and project development processes. Nationwide results from federal fiscal year 2009 are being compiled and are unavailable at the current time.

This is an annual measure using a federal fiscal year, running from Oct. 1 to Sept. 30. Annual updates are reported in the October Tracker edition, however the year-to-date total for the current fiscal year is included in each of the other editions.

#### Improvement Status:

For federal fiscal year 2009, MoDOT design savings were \$23.5 million. So far for federal fiscal year 2010, design savings are \$60.8 million.

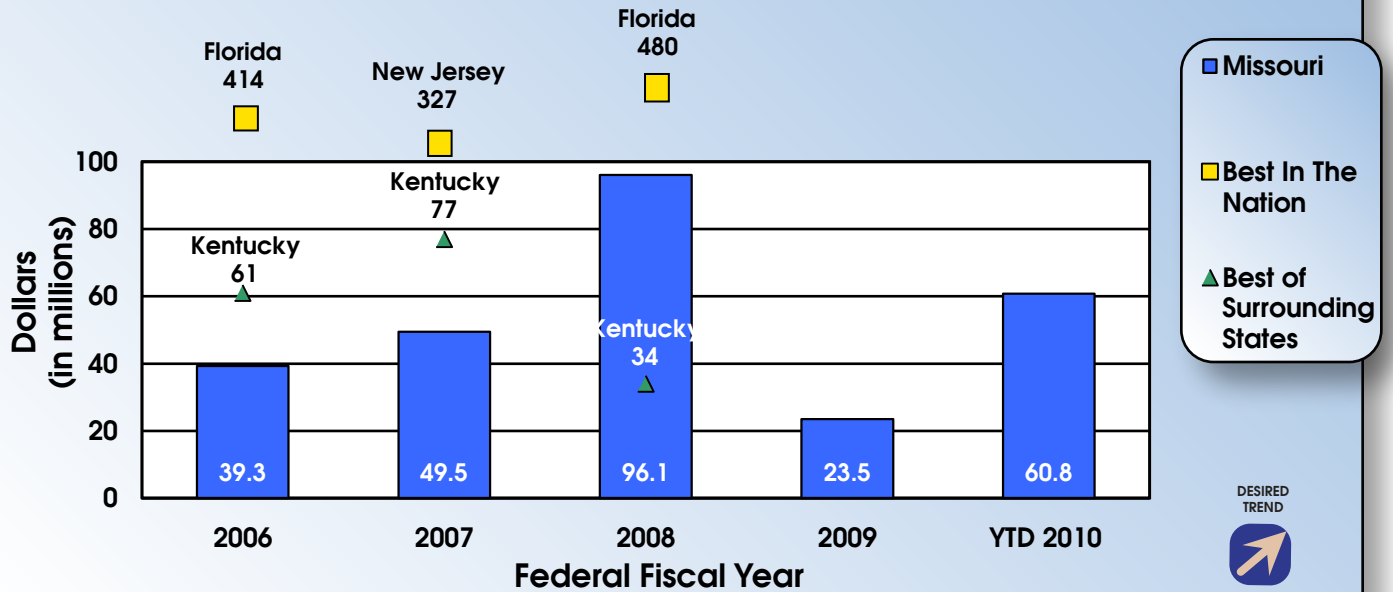
For federal fiscal year 2009, MoDOT construction savings from VECP were \$3.10 million and 81 out of 96 proposals submitted were approved.

For the first quarter of federal fiscal year 2010, MoDOT construction savings from VECP are \$3.23 million and 17 out of 21 proposals were approved.

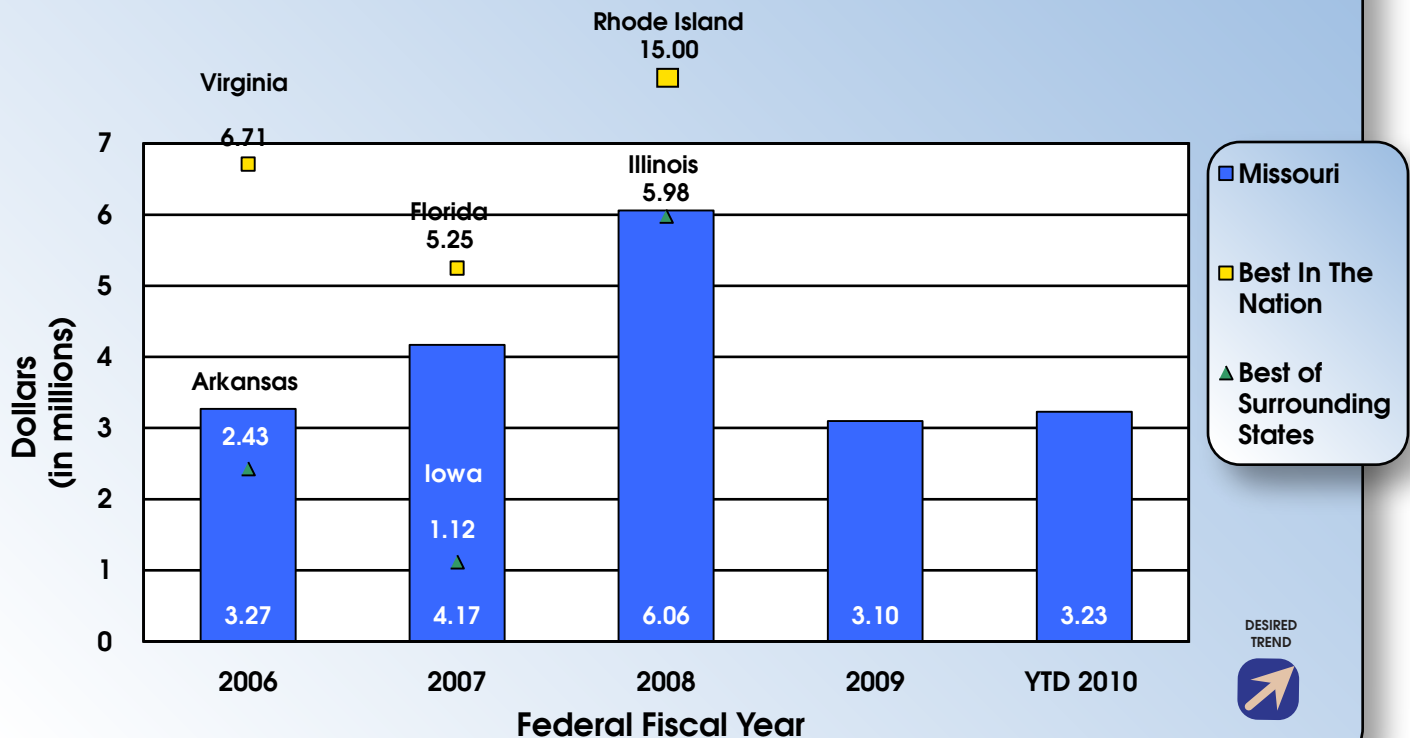


## FAST PROJECTS THAT ARE OF GREAT VALUE

### Annual Dollar Amount Saved by Implementing Value Engineering Design Phase



### Annual Dollar Amount Saved by Implementing Value Engineering Construction Phase



### Percent of customers who feel completed projects are the right transportation solutions -91

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Kathy Harvey, State Design Engineer

#### Purpose of the Measure:

This measure provides information regarding the public's perception of MoDOT's performance in providing the right transportation solutions.

#### Measurement and Data Collection:

Data for this measure is collected through an annual survey that is sent to users of projects that were completed and opened to traffic within the previous year. The goal is for the MoDOT districts to identify 30 projects – three per district – in three different categories (large – major route listed as or funded through major project dollars; medium – district-wide importance; and small – only local significance).

A sample of residents is drawn from zip code areas adjoining the roadway where the project was recently completed. The samples have included 400 addresses per project areas for a total of 12,000 surveys (11,600 in 2007 when there were 29 projects included). Nearly 2,900 surveys were returned in the initial survey, followed by 2,300 (2007), 2,697 (2008), and 2,461 in the most recent survey.

This measure is reported annually in January. Districts will continue to identify one project in each of the three categories to be surveyed, although it is recognized that it might not be possible for every district to have three projects that meet the criteria each year.

#### Improvement Status:

Project-specific questions were asked of MoDOT customers and each showed a high level of

satisfaction with important goals such as safety, convenience, less congestion, handles traffic efficiently, easy to navigate, easy to understand and well marked.

All of the key measures were statistically similar to last year's high ratings, but the fact that all measures went up suggests a slight improvement overall. The results show that most Missourians are very satisfied with their local project and generally believe that MoDOT provides the right transportation solution. 89.9 percent of the respondents were either "very" or "fairly" familiar with the project roadway, and 67.9 percent of the respondents were regular users of the affected roadway.

The majority of respondents thought that the project made the roadway:

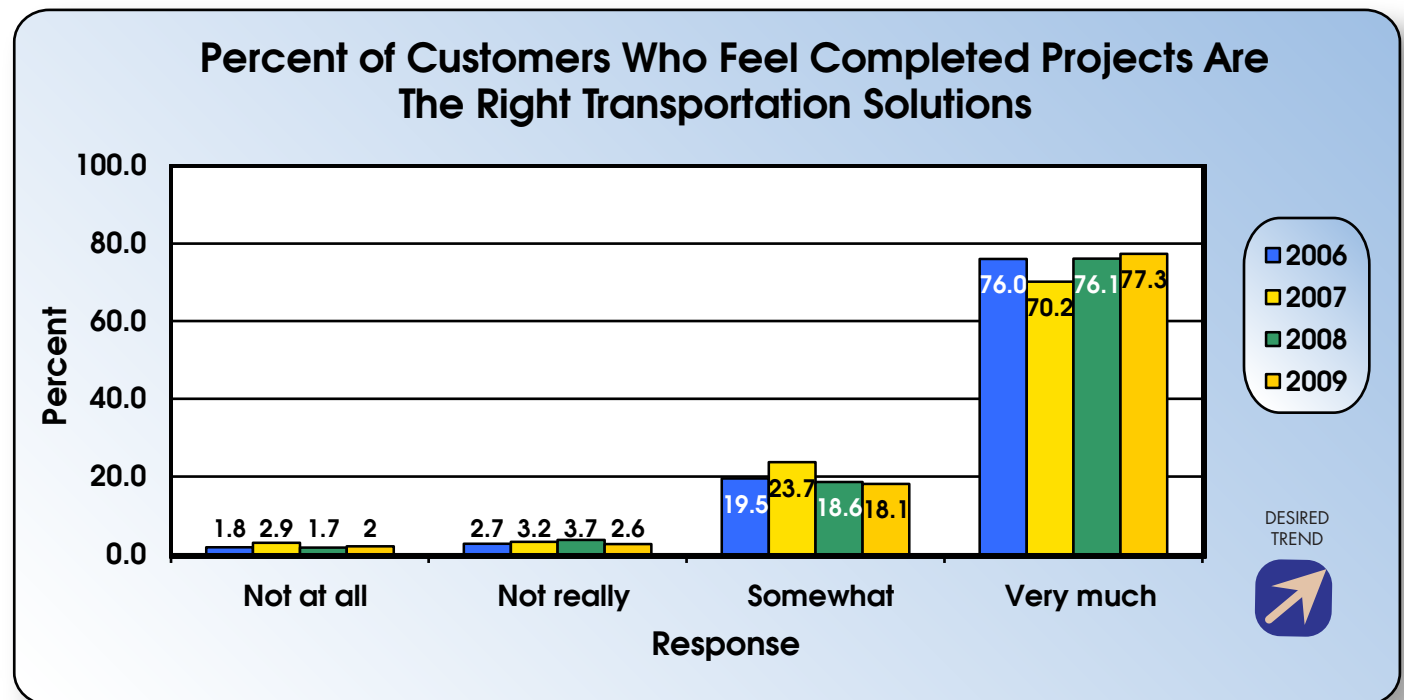
- safer (95.7 percent),
- more convenient (94.0 percent),
- less congested (84.4 percent),
- easier to drive (95.2 percent),
- better marked (92.9 percent), and
- was the right transportation solution (95.4 percent).

As part of the questionnaire, each respondent had the opportunity to provide comments about why their local project was – or was not – the right transportation solution. Each comment that was provided has been shared with the districts for their evaluation and guidance for future projects.





## FAST PROJECTS THAT ARE OF GREAT VALUE



*(This page is intentionally left blank for duplexing purposes)*





A close-up photograph of a person's hands planting a small green seedling into dark brown soil. The person is wearing a blue and white striped shirt and blue jeans. The background is slightly blurred, showing more of the person and the soil.

# ENVIRONMENTALLY RESPONSIBLE

*Tangible Result Driver – Dave Nichols, Director of Program Delivery*

MoDOT takes great pride in being a good steward of the environment, both in the construction and operation of Missouri's transportation system and in the manner in which its employees complete their daily work. The department strives to protect, conserve, restore and enhance the environment while it plans, designs, builds, maintains and operates a complex transportation infrastructure.



### Percent of projects completed without environmental violation - 10a

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Kathy Harvey, State Design Engineer

#### Purpose of the Measure:

This measure tracks environmental violations. MoDOT projects must comply with several environmental laws and regulations. To be in compliance, MoDOT makes commitments throughout the project development process that must be carried forward during construction and maintenance. In addition, the various permits obtained for projects also contain specific requirements for compliance. MoDOT must also comply with the environmental laws and regulations as it conducts its daily work in all areas of the organization.

If a violation is noted, it can result in either a Letter of Warning (LOW) or a Notice of Violation (NOV) to MoDOT. Letters of Warning can also be received as simply that, a warning to MoDOT of a special circumstance to be aware of, or for a situation that needs to be monitored so that a violation does not occur. For that reason, LOWs never will be eliminated but should be kept to a minimum. However, it is unacceptable to the department to have an NOV.

#### Measurement and Data Collection:

Both LOWs and NOVs are written correspondence to MoDOT or MoDOT's contractors from regulatory agencies, which are tracked in a MoDOT database by location or project number, as appropriate. Where tracked by project, the project with violations received may span several years. The first chart is based on a calendar year of construction projects reported to be completed during that year and the number of violations received on those projects over the life of the project. The second chart is a report by calendar year of the LOWs and NOVs received by the department for any activity and the data is updated quarterly.

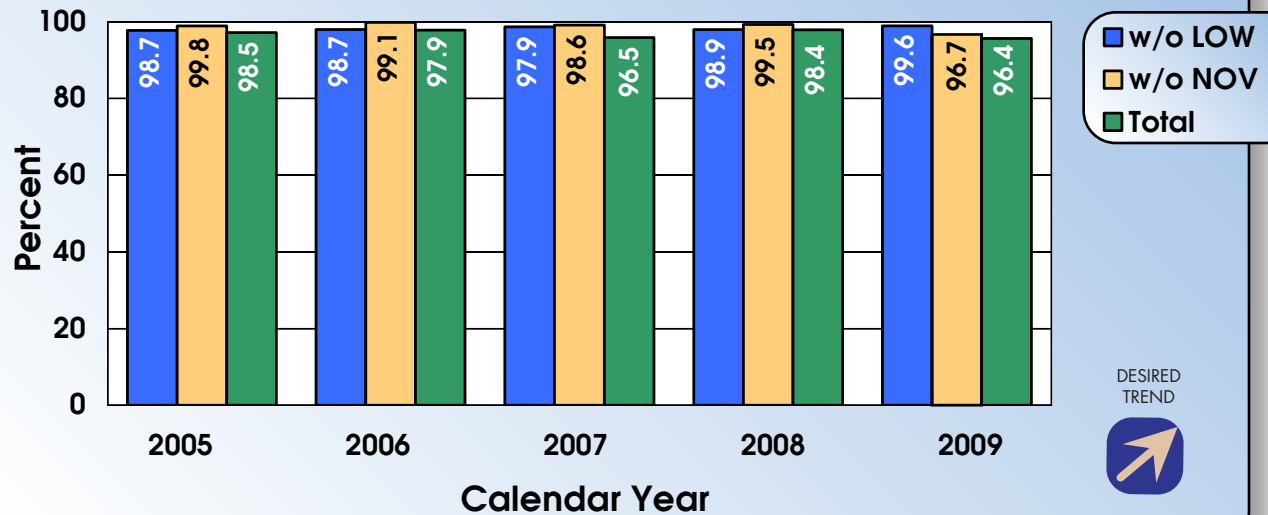
#### Improvement Status:

The percentage of projects completed without environmental violation shows a relatively level trend line for the past five years. For 2009, 96.5 percent of projects were compiled without any environmental violations. For the year, MoDOT received only one NOV and 10 LOWs.

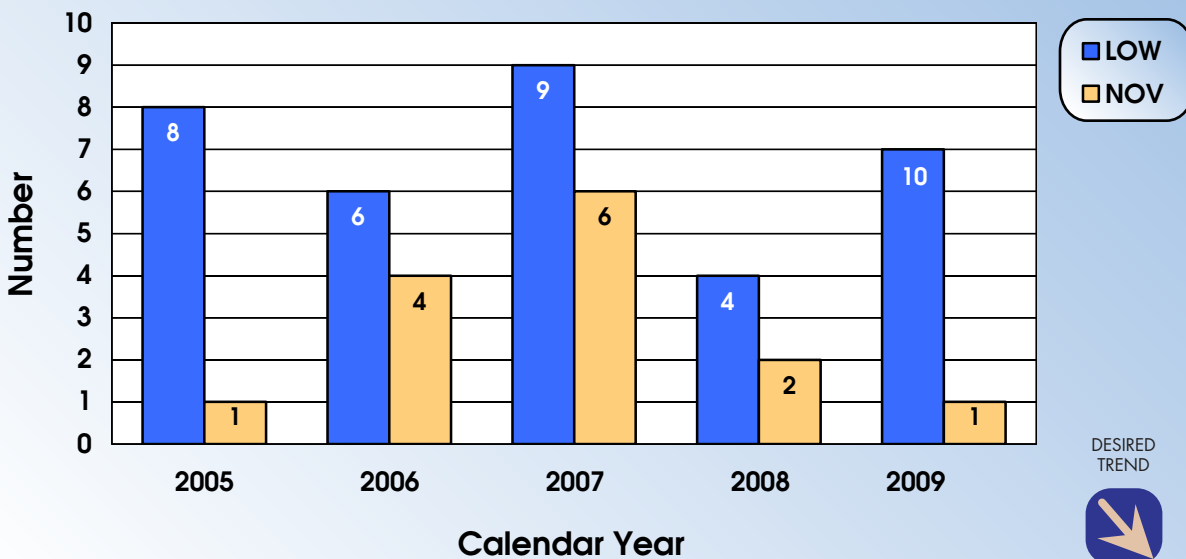
- First quarter 2009 – MoDOT received one LOW and no NOVs. The LOW was for discharge concerns at a MoDOT salt storage facility.
- Second quarter 2009 – MoDOT received two LOWs and one NOV. The NOV was for hazardous waste issues at a maintenance facility. One LOW was for failure to submit a discharge monitoring report and the other was related to best management practices for erosion and sediment control on a construction project.
- Third quarter 2009 – MoDOT received four LOWs and no NOVs. Two construction projects had a LOW, one for land disturbance activities, and the other for violation of MoDOT's Storm Water Pollution Prevention Plan. A third LOW was received by Central Office for inadequate aisle space in the materials lab and the fourth was received for a Welcome Center wastewater plant.
- Fourth quarter 2009 – MoDOT received three LOWs and no NOVs. Two of the LOWs were for effluent limitations at the Conway Welcome Center and the third was for erosion control best management practices on a construction project.



### Percent of Projects Completed without Environmental Violation



### Number of LOWs & NOVs



Note: There is no benchmark data presented with this measure. MoDOT has a zero-tolerance policy toward NOVs, but recognizes LOWs will never be eliminated due to their nature. Therefore, regardless of what other states are doing, MoDOT's desired results are zero NOVs, because NOVs are usually violations of law and state statute.

## Number of projects MoDOT protects sensitive species or restores habitat-10b

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Gayle Unruh, Environmental & Historic Preservation Manager

### Purpose of the Measure:

Missouri is home to many rare species of plants and animals, some of which are on the federal endangered species list. The Endangered Species Act of 1973 prohibits harm or harassment of these species.

Avoiding or minimizing harm to these species and protecting or restoring their habitat is a fundamental obligation of this organization. Avoidance and/or protection are the first goals of MoDOT's efforts, but in circumstances where avoidance cannot be achieved, restoration of habitat is a minimum acceptable result.

### Measurement and Data Collection:

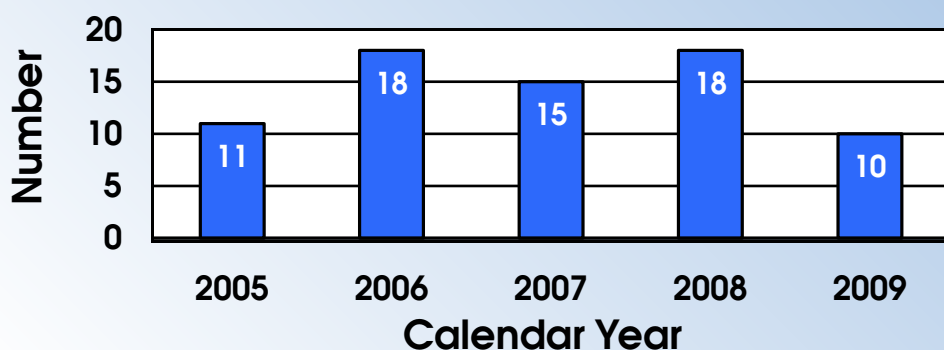
On all MoDOT projects, the department investigates and informs the U.S. Fish and Wildlife Service (USFWS) of any activity in the vicinity of a known threatened or endangered species or critical habitat. Through consultation with USFWS, MoDOT has the data to report on this measure. Because this measure focuses on projects that protect or restore sensitive habitats that could not initially be avoided, most MoDOT projects are not included in this data. This measure is tracked by calendar year with quarterly updates. Annual data are finalized and shown in the January Tracker. There is no desired trend with this

measure. The number reported will fluctuate depending on the size of MoDOT's construction program each year, type of projects being constructed, location and the ability to make adjustments to avoid impacts on sensitive species or their habitat. There are occasionally more than one species on a project.

### Improvement Status:

MoDOT protected sensitive species or restored their habitat on 10 projects in calendar year 2009. These species and habitats include the eastern hellbender (one project), Niangua darter (one project), bird nests on bridges (five projects), Meade's milkweed (one project), Indiana bat (two projects) and pallid sturgeon (one project). During 2009 a bald eagle's nest was taken down after the nesting season ended to protect the pair from nesting in an area where roadway construction and other development was about to begin. The nest is displayed at Mingo National Wildlife Refuge in southeast Missouri as an educational tool.

## Number of Projects MoDOT Protects Sensitive Species or Restores Habitat



DESIRED  
TREND  
**NA**

## Ratio of acres of wetlands created compared to the number of acres of wetlands impacted-10c

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Gayle Unruh, Environmental & Historic Preservation Manager

### Purpose of the Measure:

Wetlands are a valuable resource in Missouri, having beneficial functions such as wildlife habitat, flood storage and water quality improvement. In addition to these benefits, it is required in the Clean Water Act that impacts to wetlands are avoided, minimized or that wetlands are recreated when a wetland is destroyed during a transportation project.

### Measurement and Data Collection:

Data for this measure is calculated by comparing acres of project impacts taken from Clean Water Act permits to acres of wetland constructed, as shown in roadway design plans or by calculating the actual wetland areas recreated by MoDOT, or wetland mitigation purchased from a commercial wetland bank. Impacts may occur in a different year from the mitigation; so for the purposes of this measure, the timeframe for the reporting is when the mitigation construction is complete based on a calendar year. The national goal set by the FHWA for recreating wetland is to construct 1.5 acres of wetland for every 1.0 acre of wetland impacted. Recreating wetlands at this ratio helps to offset the beneficial functions lost during the time it takes for a wetland to develop. This

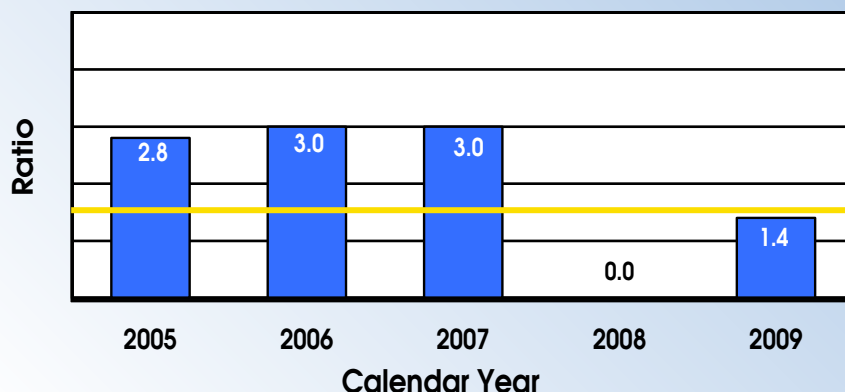
measure helps ensure that MoDOT is doing its part to maintain wetlands in Missouri.

Since this measure is also tracked by FHWA for the nation, MoDOT contacted state DOTs that are successful at meeting the 1.5-to-1 ratio. Most of the states queried said that the biggest factor in meeting the ratio is in the use of wetland mitigation banks. They had greater control over achieving their target ratios and more ecologically successful wetland mitigation. MoDOT has a statewide umbrella wetland mitigation banking agreement. This measure is tracked by calendar year with quarterly updates.

### Improvement Status:

MoDOT had nine projects with wetland impacts and mitigation in calendar year 2009. Impacts to 3.95 acres of wetland resulted in 5.53 acres of mitigation, which is a ratio of 1.4 to 1. This ratio is only slightly below the national goal of 1.5 to 1. MoDOT recently made application to the Corps of Engineers to build its fourth bank, the North Fork Spring River Mitigation Bank, in Barton County. MoDOT has operating wetland mitigation banks in the Kansas City, Central and Southeast Districts.

### Ratio of Acres of Wetlands Created Compared to the Number of Acres of Wetlands Impacted



**National Goal:**  
1.5:1

DESIRED TREND





## Percent of Missouri's clean air days -10d

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Eric Curtit, Long Range Transportation Planning Coordinator

### Purpose of the Measure:

Vehicle emissions are a significant contributor to poor air quality. MoDOT makes every effort to build and operate roads in ways that improve air quality.

### Measurement and Data Collection:

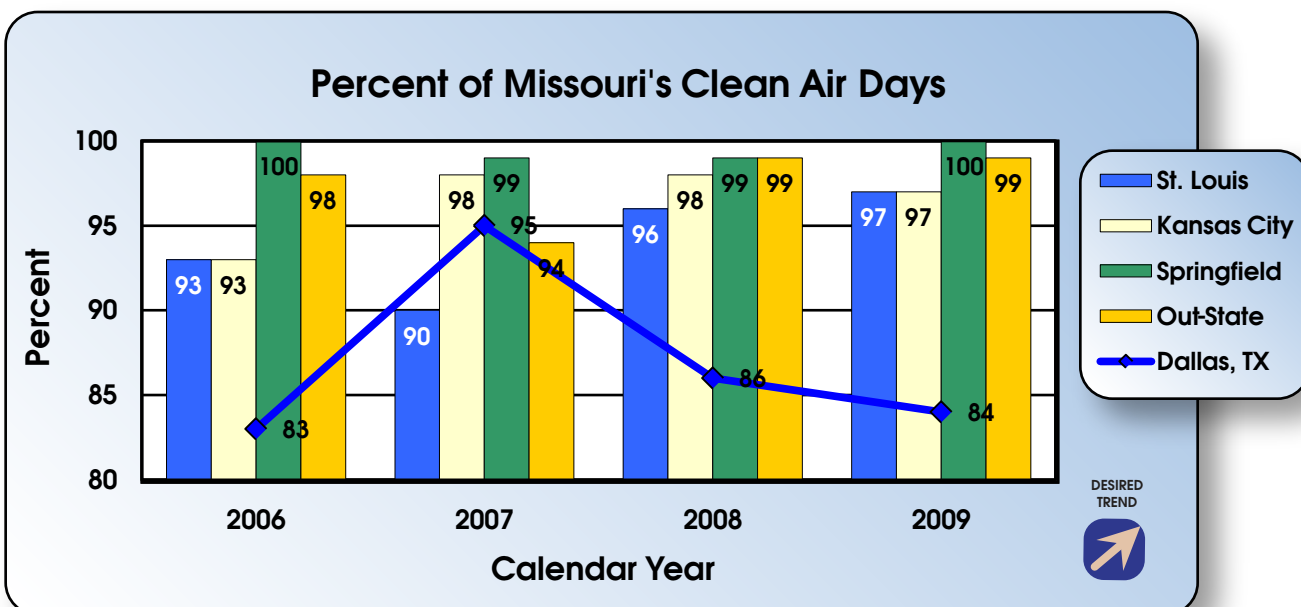
The U.S. Environmental Protection Agency (EPA) establishes air quality standards for the United States. The ground level ozone standard is used in this measure as a threshold for determining if areas of the state have clean air. EPA collects ozone readings in Kansas City, St. Louis, Springfield and the out-state areas during the annual monitoring period – April through October.

The data contained in the table below reflects the available percentage of days, by area, that Missourians experienced clean air. MoDOT compares Missouri's ozone readings to Dallas, Texas, because of its similar pollutants and distance from other areas that affect its air quality.

### Improvement Status:

In 2009, as in 2008, a cooler summer contributed to cleaner air than previous years. A new, stricter standard was established in 2008 to better meet long-term air quality improvement goals. New monitors were placed in several out state areas for the 2009 ozone season.

MoDOT is committed to improving the regions' air quality by managing congestion to reduce emissions, modifying daily operations, modifying employee action, providing information to the public, being a leader in air quality improvement, providing alternative choices for commuters and promoting the use of environmentally friendly fuels and vehicles. MoDOT continues to serve on the air quality committees in Kansas City, St. Louis and Springfield.



## Number of gallons of fuel consumed-10e

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Jeannie Wilson, Central Office General Services Manager

### Purpose of the Measure:

This measure tracks the use of fuel and fuel efficiency within MoDOT. It shows MoDOT's contribution toward environmental responsibility and conservation of resources. The first chart shows the total number of gallons of fuel consumed. The second chart indicates the average miles per gallon for the five vehicle classes that accumulate the majority of miles driven.

### Measurement and Data Collection:

This measure is intended to focus on the total fuel consumed and how wise choices can impact fuel economy. Data is collected based on the number of gallons of fuel consumed by unit recorded in the statewide financial system.

MoDOT must meet the following state guidelines: 70 percent of the light duty vehicles ( $\leq 8,500$  GVW) purchased must be alternative fuel capable; 30 percent of the fuel that our light duty alternative fuel fleet uses must be alternative fuel; 75 percent of all diesel fuel burned (off road and on road) must be a minimum of B20 blend (20 percent biodiesel and 80 percent diesel) or higher.

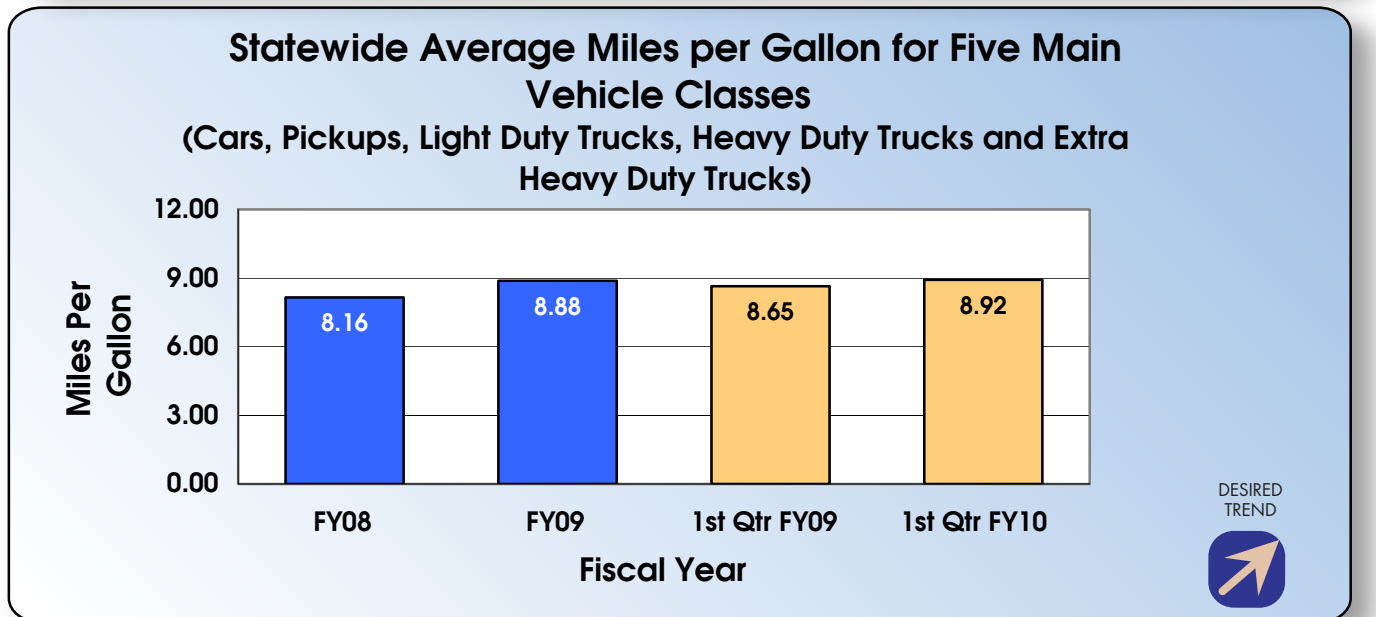
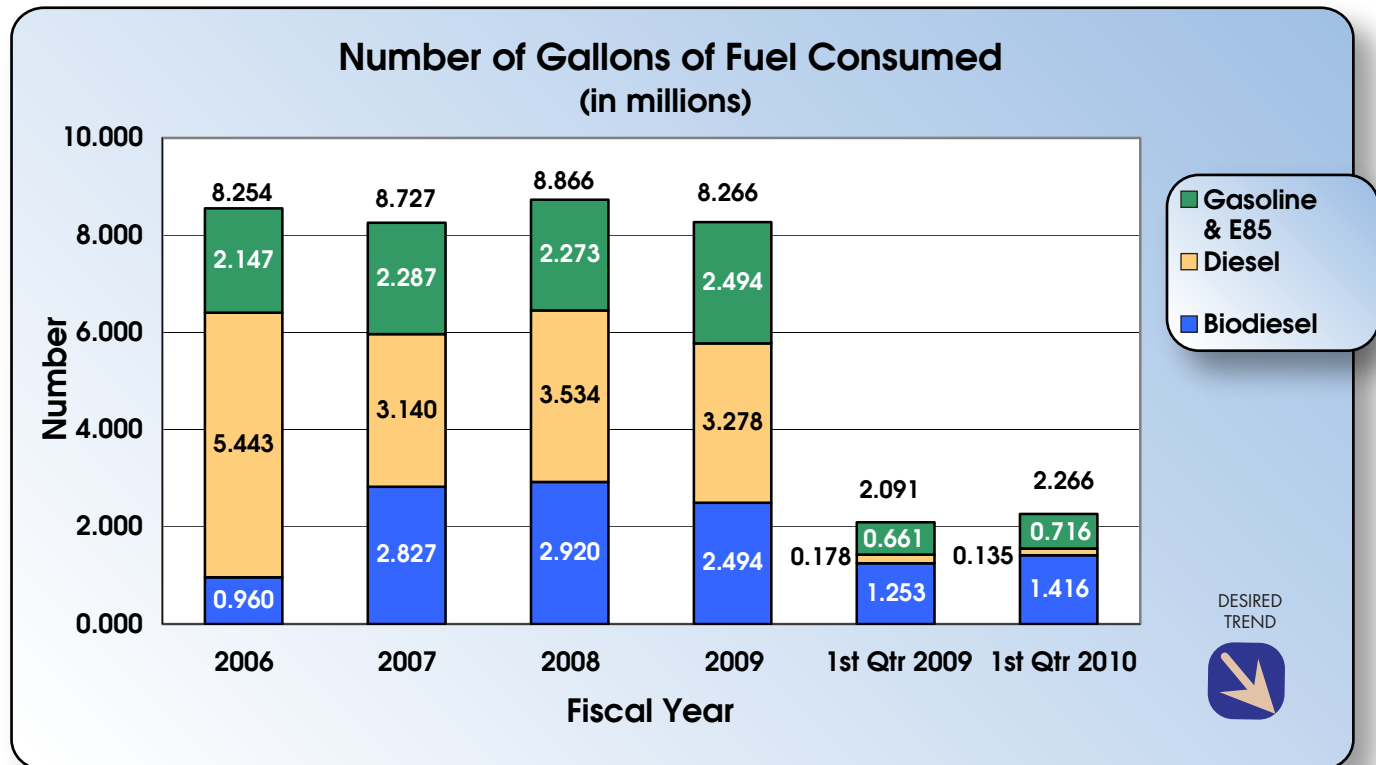
### Improvement Status:

In comparing the first quarter of fiscal year 2010 to the first quarter of fiscal year 2009, the total fuel consumed increased by 8.4 percent and the miles driven increased by 1.6 percent. This equates to approximately 175,000 gallons of additional fuel consumed.

In reviewing the data by fuel type, diesel and biodiesel increased approximately 120,000 gallons (8.4 percent), unleaded gasoline increased by 66,000 gallons (10.6 percent), and E85 decreased by 11,000 gallons (30.2 percent).

The increase is due to an increased focus on minor roads which included work that required use of heavier equipment. There were approximately 247,000 more miles/hours recorded for first quarter fiscal year 2010 compared to the first quarter of fiscal year 2009. This increase includes approximately 600,000 more miles/hours recorded to asphalt repair and is partially offset by decreases in areas such as flood response. We continue to make improvements to the mile per gallon measure as we strive to improve the accuracy and timeliness of entering usage.





## Number of historic resources avoided or protected as compared to those mitigated -10f

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Bob Reeder, Historic Preservation Manager

### Purpose of the Measure:

Federal historic preservation laws relating to federally funded projects, gaining public and agency support for particular projects, and general environmental stewardship require MoDOT to avoid, minimize or mitigate project impacts to historic buildings, bridges and marked cemeteries whenever feasible. Historic properties typically are more than 50 years in age and must retain most or all of their original features, be a good example of a rare or significant style or type, or be associated with a historically important person or event. Compiling information about project impacts to important cultural resources provides a measure of MoDOT's success at avoiding, protecting or mitigating project impacts to important cultural resources.

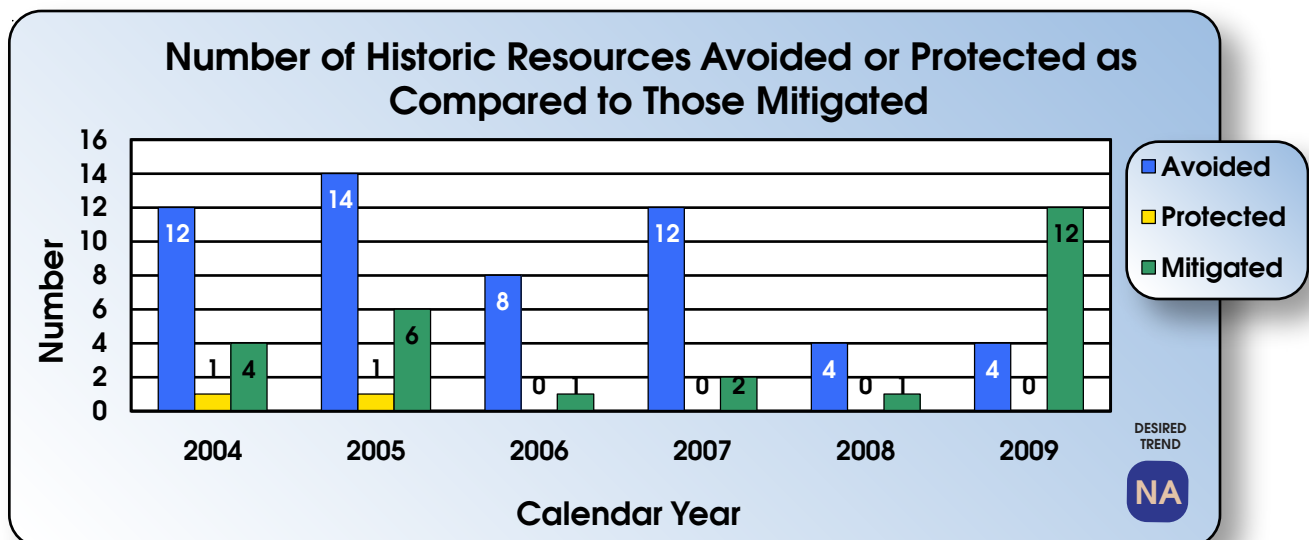
### Measurement and Data Collection:

Data collection begins at the approved conceptual plans stage for projects. As project design plans and right of way plans are prepared by the district, department staff track the number of historic resources in project footprints and the number of resources that can be avoided or protected by revising the design of a project versus the number of resources MoDOT can not avoid and must be mitigated. The data includes only historic resources identified as potentially affected by projects after the conceptual plan stage. The data does not include historic resources avoided during early project planning or

those avoided during consideration of different alignments during National Environmental Policy Act studies. This measure has no overall desired trend. For any year, data for the measure will vary due to the number of projects in the MoDOT program and the specific nature of those projects. This measure is tracked by calendar year with quarterly updates.

### Improvement Status:

MoDOT avoided project impacts to all but 12 historic resources during 2009. All 12 were bridges, including two on Route 17 (one in Miller County and one in Pulaski County), the Missouri River Bridge at Miami, the Missouri River Bridge at Brownsville, the Route 5 New Franklin viaduct, the Route 76 Branson bridge, a Route 45 bridge in Platte County, and five smaller bridges to be replaced by the Safe & Sound Bridge Improvement Program. Adverse impacts from the demolition of these bridges were mitigated through the preparation of detailed photographic and historical documentation of each bridge. While there is no desired trend to this measure, the goal of MoDOT's historic preservation efforts is to minimize adverse project impacts to historic properties whenever it is feasible and prudent.





### Number of tons of recycled/waste materials used in construction projects-10g

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Dave Ahlvers, State Construction and Materials Engineer

#### Purpose of the Measure:

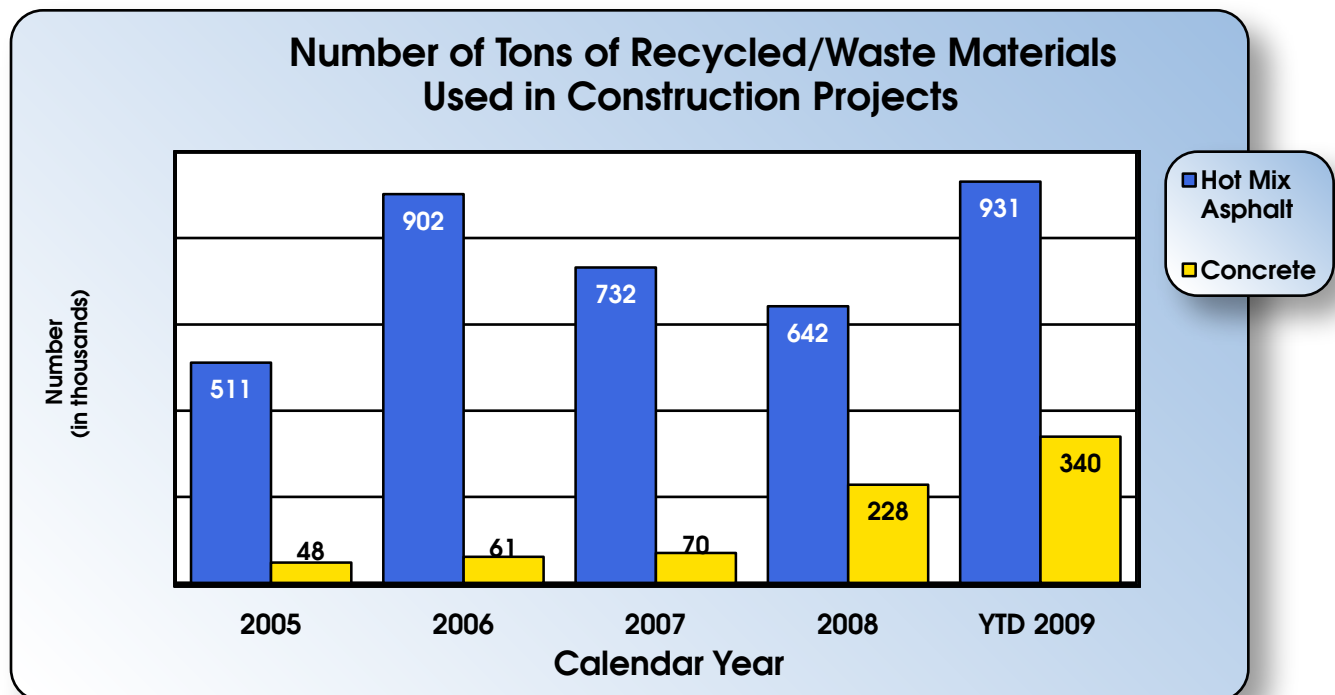
This measure tracks MoDOT's efforts to be environmentally conscious through the use of recycled/waste material when applicable.

#### Measurement and Data Collection:

The number of tons of recycled/waste material used in construction projects is measured through MoDOT's construction management database, which tracks material incorporated into projects. Data is collected on an annual basis due to the seasonal nature of the construction. The annual total is finalized in each April edition.

#### Improvement Status:

Contractors continue to look at reclaimed asphalt pavement and shingles (RAP and RAS) to reduce hot mix asphalt costs. In 2009, 75 percent of the mixtures issued contained either RAP or RAS, or both. The average virgin asphalt content of bituminous pavement mixtures has dropped from 5.3 percent to 4.2 percent since 2005. This represents a 20 percent decrease in the new liquid asphalt.



*(This page is intentionally left blank for duplexing purposes)*



# EFFICIENT MOVEMENT OF GOODS

*Tangible Result Driver – Brian Weiler, Multimodal Operations Director*

Missouri's location in the nation's center makes it a major crossroads in the movement of goods. Transportation infrastructure must be up to the task so that as the flow of freight becomes more efficient, businesses and communities share the economic benefits.







### Freight tonnage by mode- 11a

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Ernie Perry, Administrator of Freight Development

#### Purpose of the Measure:

This measure tracks trends and indicates diversification of freight movement on Missouri's transportation system.

#### Measurement and Data Collection:

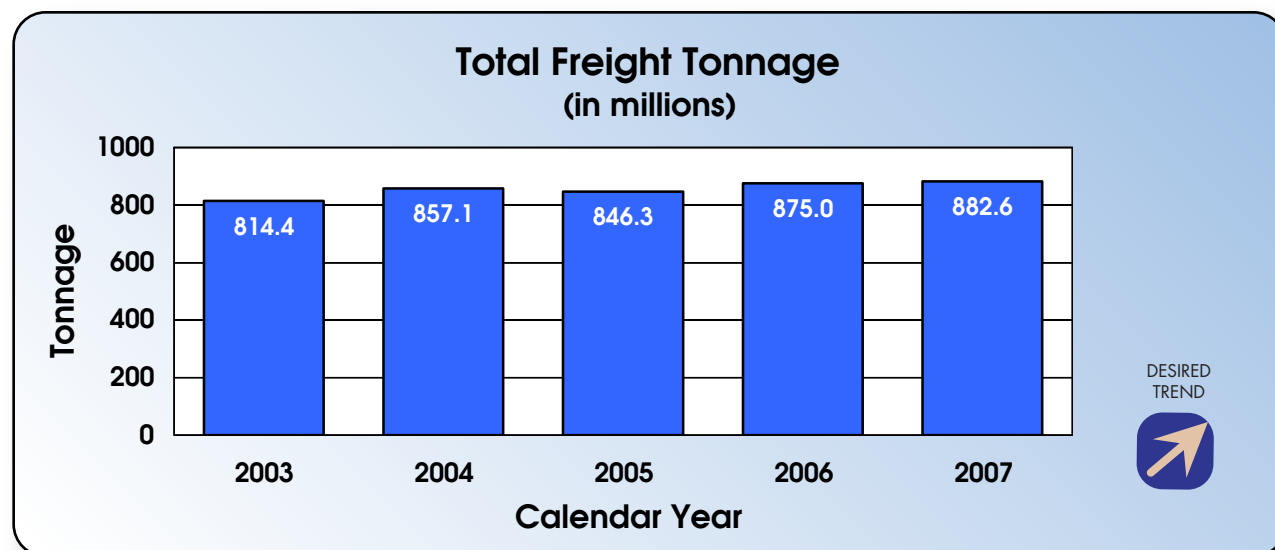
This is an annual measure. However, individual charts are updated as new data is obtained from external sources. Port tonnage is reported to MoDOT from public ports and the Army Corps of Engineers. Air cargo data is collected via mail survey to commercial airports with known cargo activity. Rail tonnage is obtained from the Association of American Railroads. MoDOT calculates motor carrier freight movement using commercial vehicle miles traveled, trip length per shipment and average truck cargo weight.

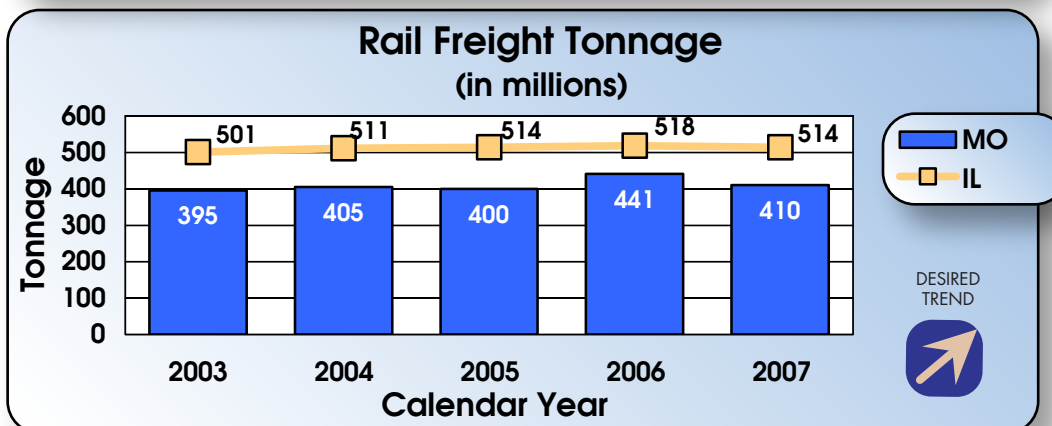
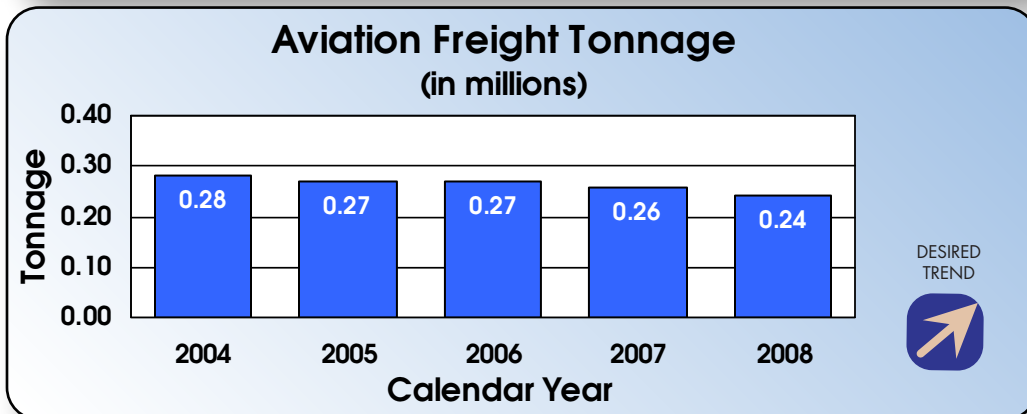
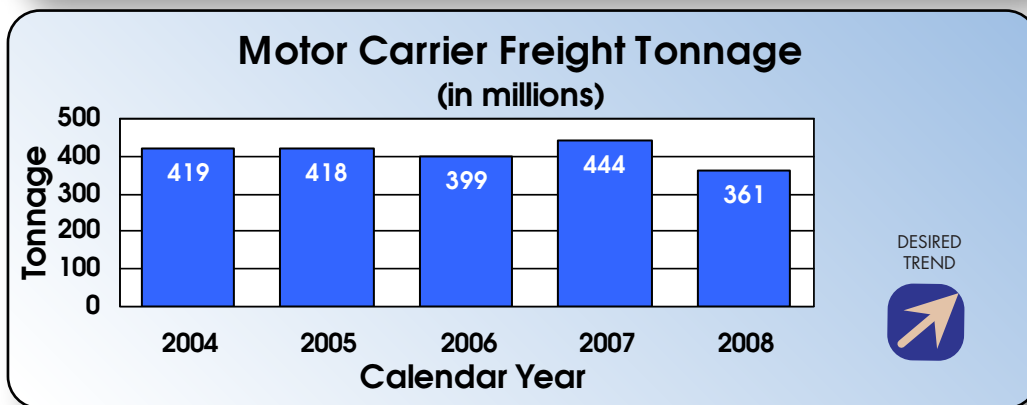
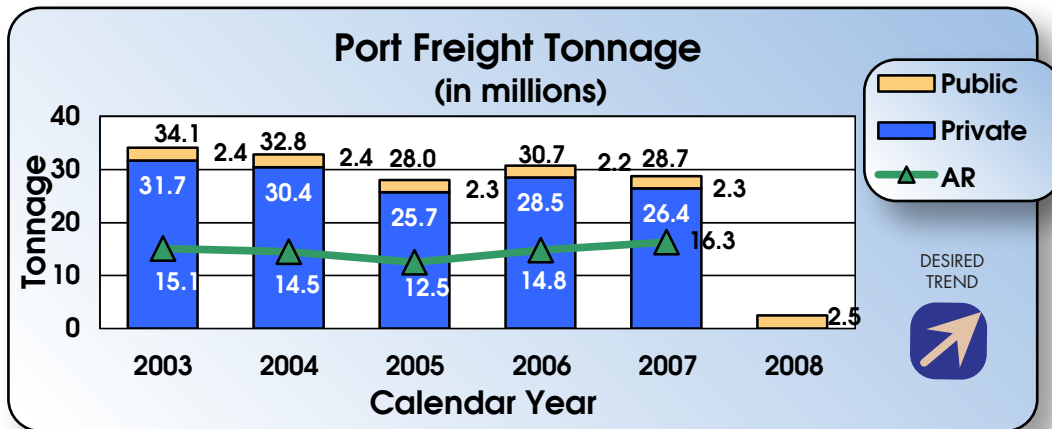
#### Improvement Status:

Total freight tonnage for all modes increased slightly in 2007 to more than 880 million tons. While the 2007 data does not reflect ongoing economic trends, in 2008, all freight modes show the effects of the continued economic downturn. Nationally reported freight transport rates are down from between 11 and 40 percent. However, the rate of decline is

decreasing and there is some hint of a rebound in some sectors of the manufacturing and logistics areas. Port tonnage has remained relatively steady since 2003 despite low flows on the Missouri River. Proposals to mitigate for these decreased freight movements on the Missouri river have been submitted to the federal Maritime Administration and Missouri's congressional body. On the Mississippi River, long-term growth of river transportation is hampered by an inadequate lock and dam system. Motor carrier data may not directly reflect exact industry tonnage amounts and should only be used to indicate general industry trends.

In 2008, motor carrier tonnage is off nearly 20 percent while truck numbers increased slightly. Aviation tonnage continues to be impacted by a downturn in the aviation industry and the resulting financial impacts to airlines, which carry a significant portion of high-value air cargo. MoDOT's Aviation Advisory Committee helps identify ways to better support the commercial aviation industry. Rail freight tonnage decreased slightly less than 10 percent in 2007, which is again likely related to the overall economic downturn.





## Percent of trucks using advanced technology at Missouri weigh stations -11b

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Barbara Hague, Special Projects Coordinator

### Purpose of the Measure:

This measure indicates motor carriers' acceptance of tools designed to improve the flow of freight traffic on Missouri highways.

### Measurement and Data Collection:

For this quarterly measure, data is collected by HELP, Inc.'s PrePass system computers which scan transponder-equipped vehicles as they approach 19 Missouri weigh stations. Pavement sensors check the vehicle's weight while computers review MoDOT's records to determine the carrier's compliance with safety, insurance and other state and federal regulations. Drivers are notified to stop or are allowed to continue without delay. Carriers that comply with state and federal regulations save time and money.

The Missouri State Highway Patrol provides a quarterly measure of the number of trucks that use Missouri's weigh-in-motion scales at Mayview and Foristell. These scales measure weight as trucks pass over them at 40 mph. Using ramp scales rather

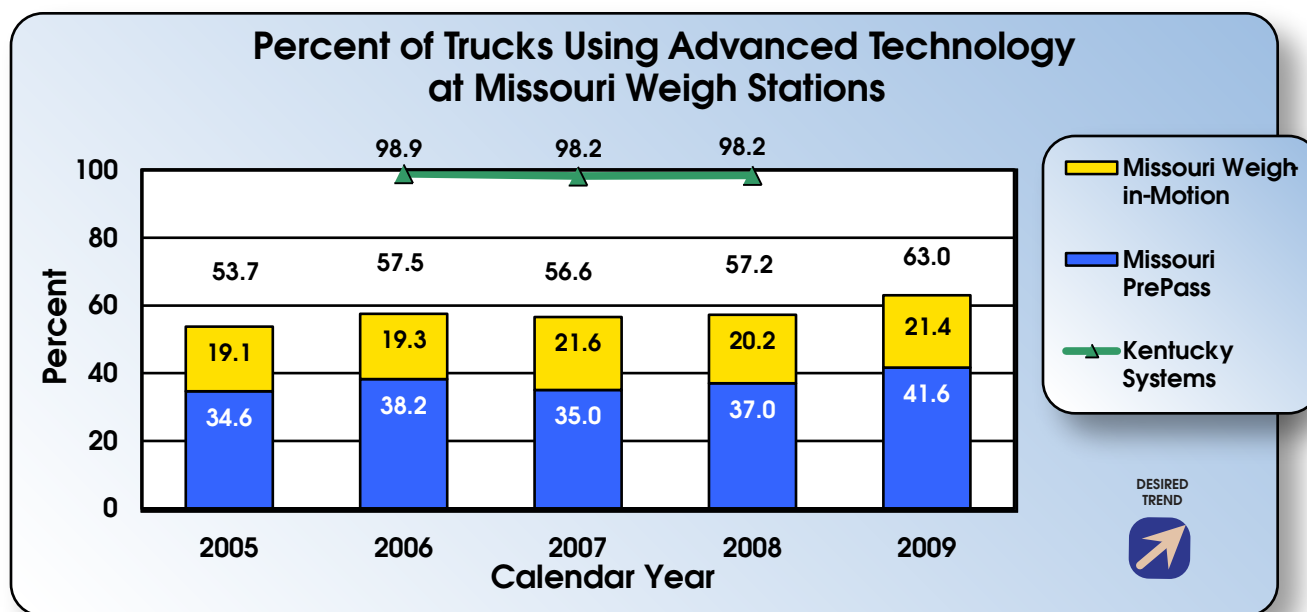
than verifying weight on fixed scales that require a full stop saves both time and money.

The benchmark state of Kentucky uses Ramp Sorter weigh-in-motion scales as its primary weighing tool and participates in Norpass, a mainline verification system. Kentucky's mainline verification numbers are much lower than Missouri's because their use of fixed scales is limited.

### Improvement Status:

Overall, the use of advanced technology in the marketplace remained constant for the year. Vehicles with transponders were busy in November reflecting the largest number of vehicle counts at the weigh station sites although the number of vehicles enrolled in the PrePass Program remained constant.

A contractor was selected and meetings with vendors held for the virtual weigh station at Interstate 55 and U.S. 61. Design work continued for the relocation of the I-55 Barnhart weigh facility to the current Bloomsdale rest area site.



## Interstate motor carrier mileage-11c

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Joy Prenger, Accounting Services Supervisor

### Purpose of the Measure:

This measure reports the fluctuations of motor carrier freight movement in Missouri. MoDOT uses the information to monitor freight movement trends.

### Measurement and Data Collection:

Data is collected quarterly. International Fuel Tax Agreement tax returns filed by member states and provinces and monthly reports of mileage data by the members are used to monitor the number of taxable miles traveled in Missouri by all motor carriers.

### Improvement Status:

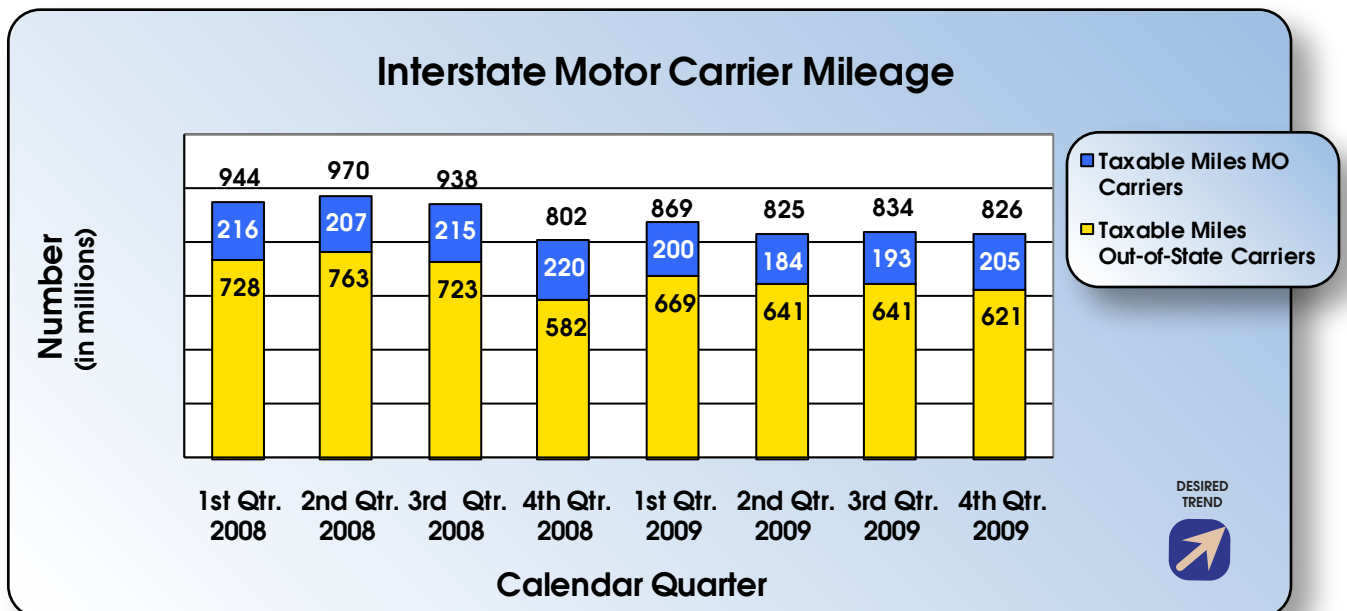
Total interstate miles traveled in Missouri decreased 1 percent from last quarter.

During the fourth quarter of 2009, motor carriers traveled 3 percent more miles in Missouri than in the fourth quarter of 2008. Compared to the same time last year, out-of-state carriers traveled 6.7 percent

more miles here and Missouri-based companies drove 6.8 percent fewer miles in their home state.

A comparison of 2008 and 2009 annual measures shows a decrease in motor carrier mileage. In 2009, interstate miles traveled fell 8.18 percent. Missouri-based companies traveled 8.86 percent fewer miles and out-of-state carriers traveling in Missouri reported 8.01 percent fewer miles. Industry reports indicate:

- The freight index rose 1 percent in October from its September level. The October increase followed a two-month decline of 4.3 percent in August and September. This was the freight index's largest two-month drop in more than eight years.
- The average price of diesel fuel is \$2.88. This is an increase of \$0.565 per gallon one year ago.





### Percent of satisfied motor carriers -11d

**Results Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** DeAnne Rickabaugh, Outreach Coordinator

#### **Purpose of the Measure:**

This measure tracks MoDOT's progress toward the goal of expeditiously meeting the needs of the motor carrier industry and facilitating freight movement. MoDOT's Motor Carrier Services team uses the data to identify opportunities to improve customer satisfaction.

#### **Measurement and Data Collection:**

MCS personnel, working with Heartland Market Research, LLC, revised a survey to collect customer satisfaction data. The survey, sent to 800 MCS clients each month, addresses all five MCS program divisions, International Registration Plan, International Fuel Tax Agreement, Oversize/Overweight Permitting, Safety and Compliance and Operating Authority. Survey respondents identified the services they use when doing business with MCS, then indicated their level of satisfaction with 12 customer service factors such as "timely response," "friendly," "respectful," and "outcome." They also gave an "overall satisfaction" score. Customers used a four-point scale: 4 = Very Satisfied, 3 = Satisfied, 2 = Dissatisfied and 1 = Very Dissatisfied. Survey results are reported quarterly.

H. J. Heinz Company is the benchmark for this measure that also mirrors measure 5a, Percent of Overall Customer Satisfaction. The American Customer Satisfaction Index reports that Heinz has the highest customer satisfaction rate of 200 companies and government agencies it scores – 89 percent.

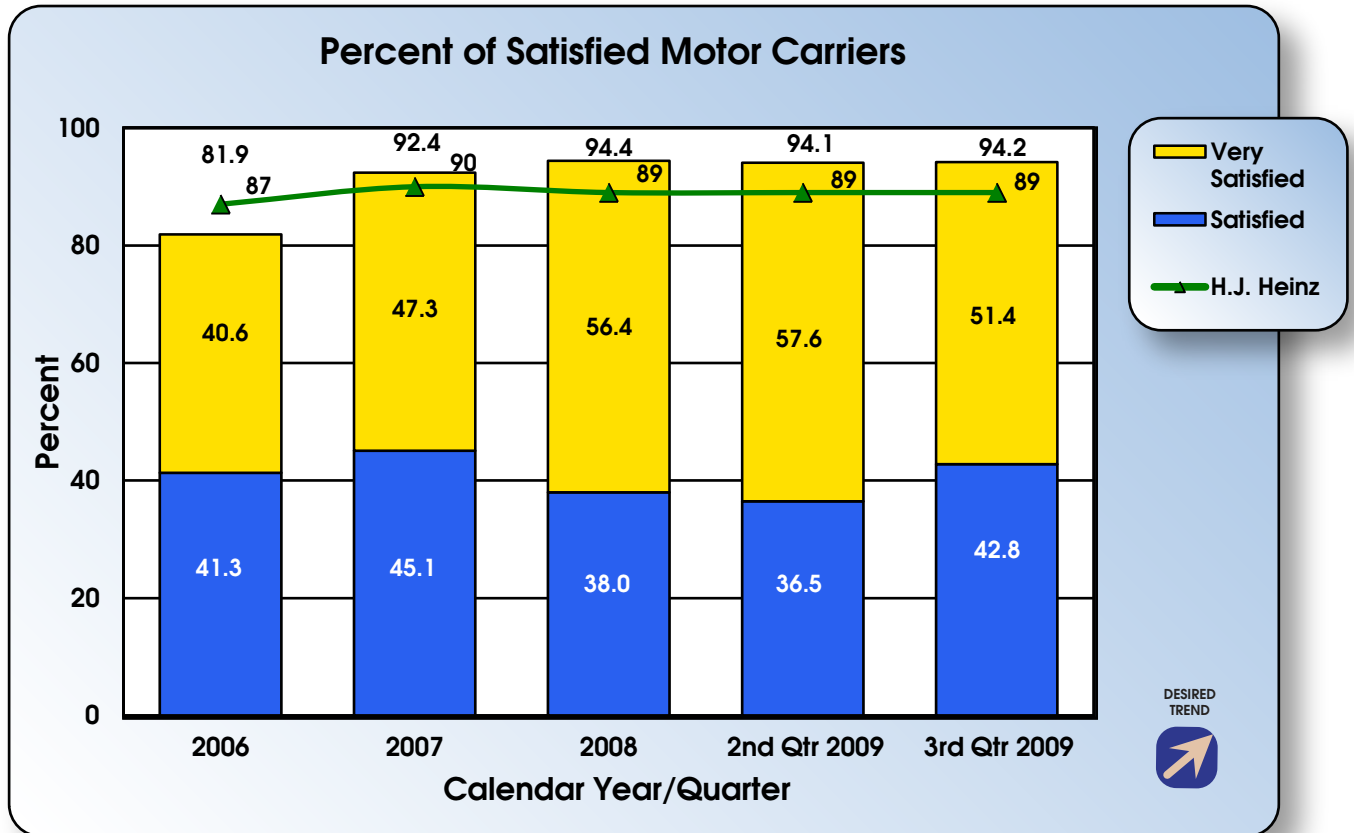
#### **Improvement Status:**

This quarter's data stems from customers' opinions of service received between July and September 2009.

The survey reports Motor Carrier Services' customer satisfaction rating remained steady at 94.2 percent in the third quarter of 2009, one tenth of a point above the rating in the second quarter of 2009. When compared to the third quarter of 2008, the score is 1.4 points lower. The ratio of people who said they were "very satisfied" with the service they received from MCS in the first quarter 2009 is 51.4 percent, a 6.2 percent decrease from the previous quarter.

MCS takes risks in an effort to balance resources, optimize employee time and increase customer usage of Motor Carrier Express while still maintaining a high level of customer service. In recent years, MCS decreased resources while increasing output, expectations and customer satisfaction.

Annual ratings for 2006-2008 describe steady progress toward a majority of "very satisfied" customers.



### Customer satisfaction with timeliness of Motor Carrier Services' response-11e

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** DeAnne Rickabaugh, Outreach Coordinator

**Purpose of the Measure:**

This measure tracks motor carriers' satisfaction with MoDOT Motor Carrier Services' speed of response.

**Measurement and Data Collection:**

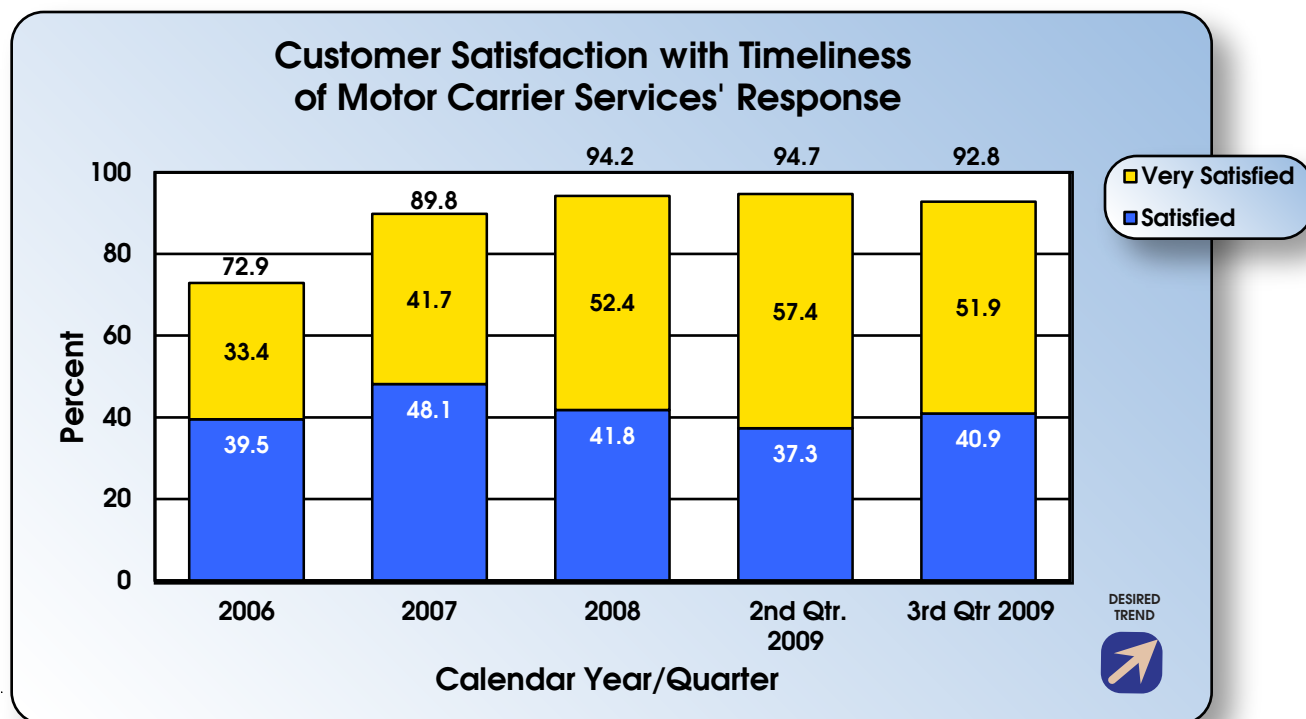
Each month, MoDOT's contractor, Heartland Market Research, LLC, surveys a pool of 800 motor carriers who contacted MCS in the previous month. These customers are asked to evaluate their satisfaction with 12 customer service factors across the five MCS program divisions, International Registration Plan, International Fuel Tax Agreement, Safety and Compliance, Oversize/Overweight Permitting and Operating Authority. "Timely Response" is one factor carriers evaluate with a four-point scale: 4 = Very Satisfied, 3 = Satisfied, 2 = Dissatisfied and 1 = Very Dissatisfied. Survey results are reported quarterly.

**Improvement Status:**

This quarter's data stems from customers' opinions of service received during July, August and September 2009.

At 92.8 percent, satisfaction with Motor Carrier Services' timely response is 1.9 points lower than last quarter and 1.9 percentage points lower than the same time last year. The rate of "very satisfied" customers fell 5.5 points since last quarter and is 1.6 points lower than the same time in 2008.

With the help of Information Systems and the Controller's Office, a hardware overhaul and software upgrade was accomplished over the New Year's holiday weekend. The changes improved the MoDOT Carrier Express' speed and reliability.



*(This page is intentionally left blank for duplexing purposes)*







# EASILY ACCESSIBLE MODAL CHOICES

*Tangible Result Driver – Brian Weiler, Multimodal Operations Director*

MoDOT has an active role in all modes of transportation, including rail, air, water, and transit. Transportation is more than highways and bridges. Every day millions of tons of goods move through the state by rail. Thousands of passengers use Missouri's airport facilities. And hundreds of barges navigate state waterways. All of these modes combine to keep Missouri's economy robust and vital.

## Number of airline passengers-12a

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Joe Pestka, Administrator of Aviation

### Purpose of the Measure:

This measure tracks the number of passengers boarding airplanes at Missouri's commercial airports. It helps determine the viability of Missouri's commercial airline industry. This number is also used by the Federal Aviation Administration (FAA) to help determine airports' capital improvement funding levels.

### Measurement and Data Collection:

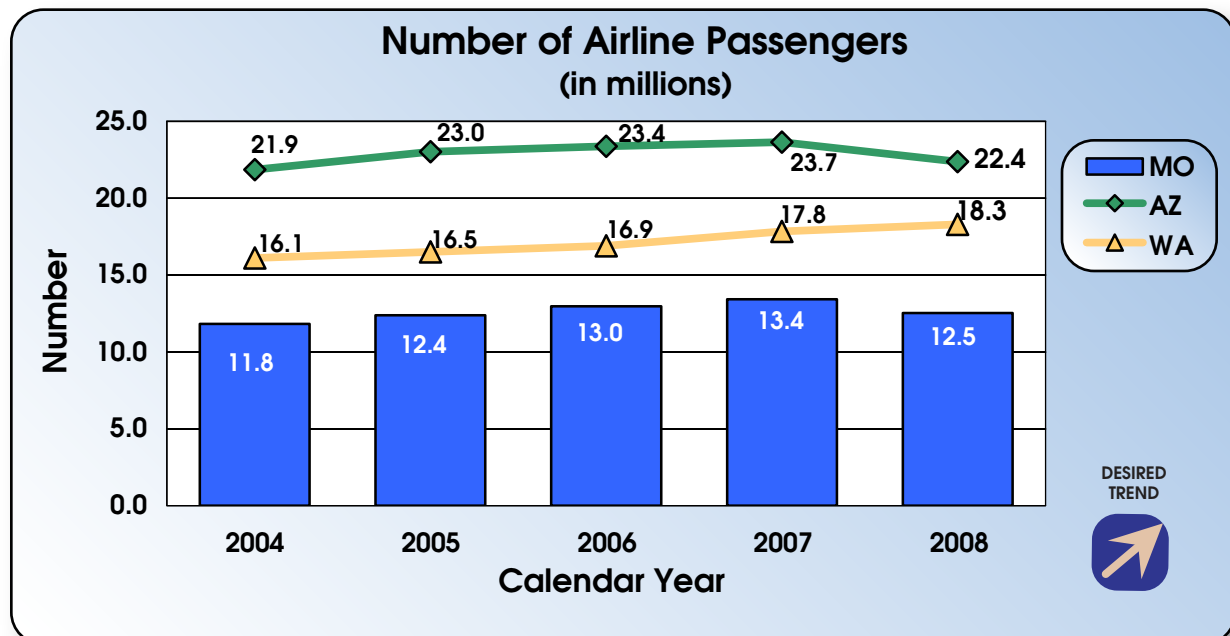
The data is collected annually from FAA. Comparison data has been collected from the same source for the states of Arizona and Washington. These two states were selected based on similar populations in 2004. The annual passenger boardings' data provided by the FAA is normally published in October for the preceding year. Airline

passengers are defined as passengers boarding airplanes.

### Improvement Status:

Airline passengers have decreased by approximately 900,000 in Missouri from 2007 to 2008 but have grown at a modest average annual rate of 1.4 percent since 2004. Increases in airline operational costs, weak economic conditions and a decrease in flight schedules at Kansas City International Airport and Lambert St. Louis International Airport have attributed to a decrease in passenger boardings.

State legislation passed in 2008 includes up to \$2 million annually for the study and promotion of expanded domestic or international scheduled commercial service or the study and promotion of intrastate scheduled commercial service.





## Number of daily scheduled airline flights-12b

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Joe Pestka, Administrator of Aviation

### Purpose of the Measure:

This measure tracks the number of airline flights. The data assists in determining options available to the traveling public. It provides an indication of the airline industry's economic stability in Missouri.

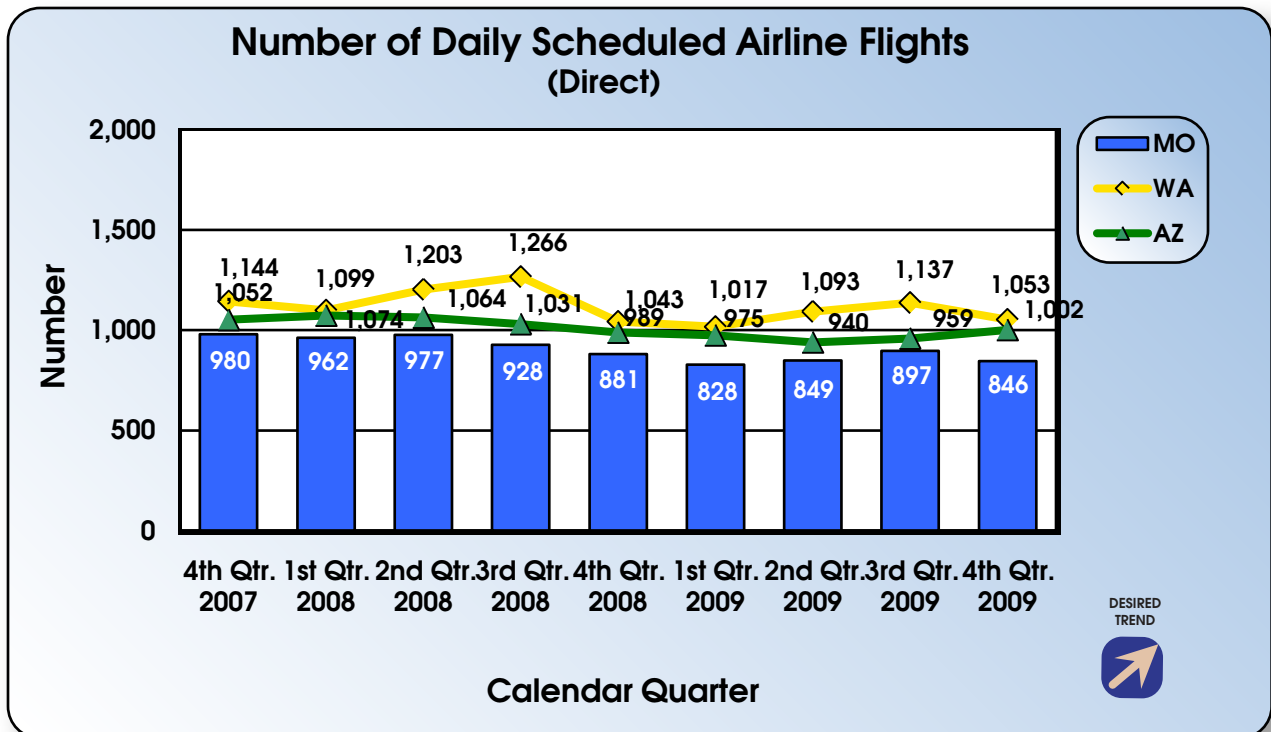
### Measurement and Data Collection:

A direct scheduled airline flight is a take-off by a scheduled commercial air carrier. A direct flight has the same flight number and is flying to one or more destinations. Data is being collected from seven airports in the state that accommodate scheduled airline flights. These airports are: St. Louis Lambert International, Kansas City International, Springfield-Branson, Joplin, Columbia, Waynesville and Cape Girardeau. Comparison data has been collected for the commercial airports in Arizona and Washington. These two states were selected based on similar populations in 2004. The data is collected from the Official Airline Guide. The flights are tracked on a monthly basis with a daily snapshot collected for each month and are then averaged on a quarterly basis.

### Improvement Status:

Daily scheduled airline flights in Missouri have decreased from 881 in the fourth quarter of 2008 to 846 in the fourth quarter of 2009.

State legislation passed in 2008 includes up to \$2 million annually for the study and promotion of expanded domestic or international scheduled commercial service and for the study and promotion of intrastate scheduled commercial service. MoDOT is participating with five rural commercial service airports in an air service study.





## Number of business-capable airports -12c

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Joe Pestka, Administrator of Aviation

### Purpose of the Measure:

This measure tracks the number of airports capable of handling business aircraft. Local communities and economic development agencies can use airports to assist in increasing a community's economic viability for business retention and development.

### Measurement and Data Collection:

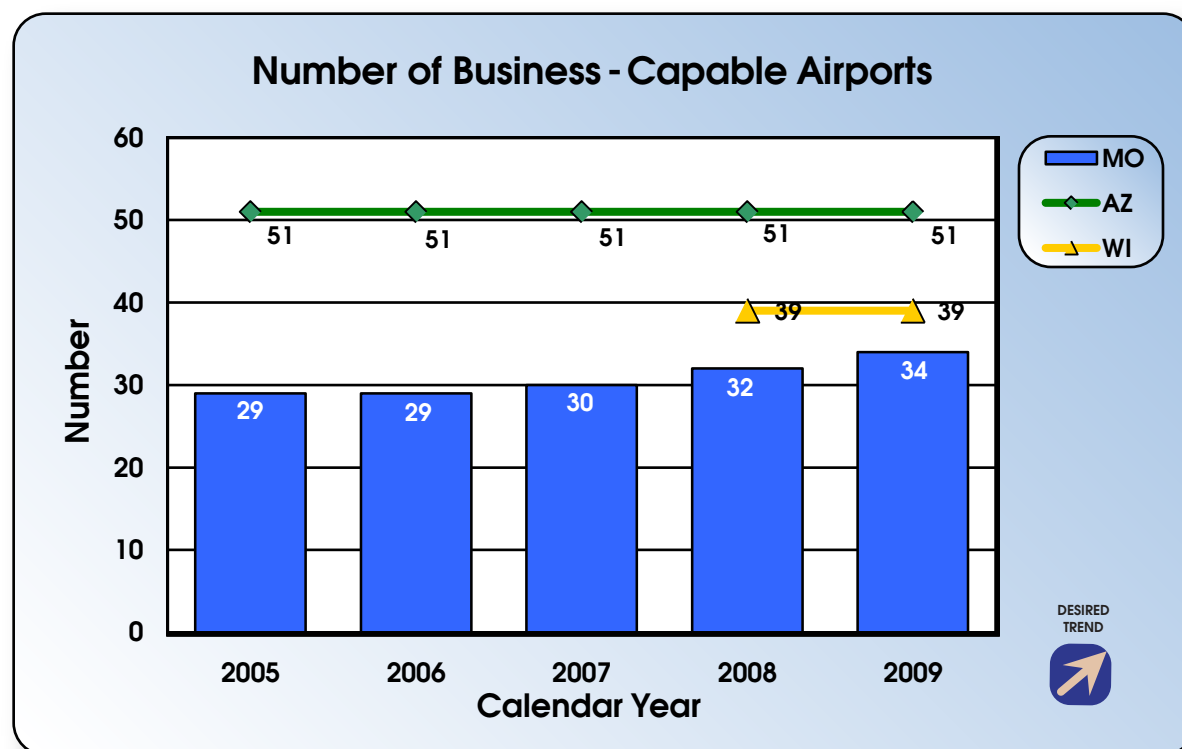
The graph shows the number of business-capable airports. A business-capable airport is defined as accommodating business- or corporate-type aircraft with a runway length of 5,000 feet or more.

Comparison data starting in 2005 has been collected from Arizona and from Wisconsin starting in 2008. These states have a population similar to Missouri. Geographically, Wisconsin is similar to Missouri while Arizona is approximately 65 percent larger than Missouri. Data is collected annually by

monitoring airport developments and Federal Aviation Administration records.

### Improvement Status:

The State Airport System Plan Update and the annual development of MoDOT's Statewide Transportation Improvement Plan identify airports that meet the demand criteria and would support the development of a 5,000-foot runway. A new business-capable airport opened in Branson West in December 2009 and a privately owned commercial service airport opened in Branson in May 2009. State legislation passed in 2008 increased the cap on the State Aviation Trust Fund from \$6 million to \$10 million annually, which will allow additional funding for airport improvements.



### Number of transit passengers -12d

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Steve Billings, Administrator of Transit

#### Purpose of the Measure:

This measure gauges the use of public transit mobility services in Missouri. It also provides a historical perspective and trend of public transit service use in Missouri.

#### Measurement and Data Collection:

The total number of transit passengers is measured by the annual total of one-way unlinked transit trips taken by passengers on public transit vehicles. Data is obtained from urban and rural providers of general public transit services. This measure is benchmarked to the state of New York, which has a historically high usage of public transit services. This is an annual fiscal year measure with Missouri data updated in October.

#### Improvement Status:

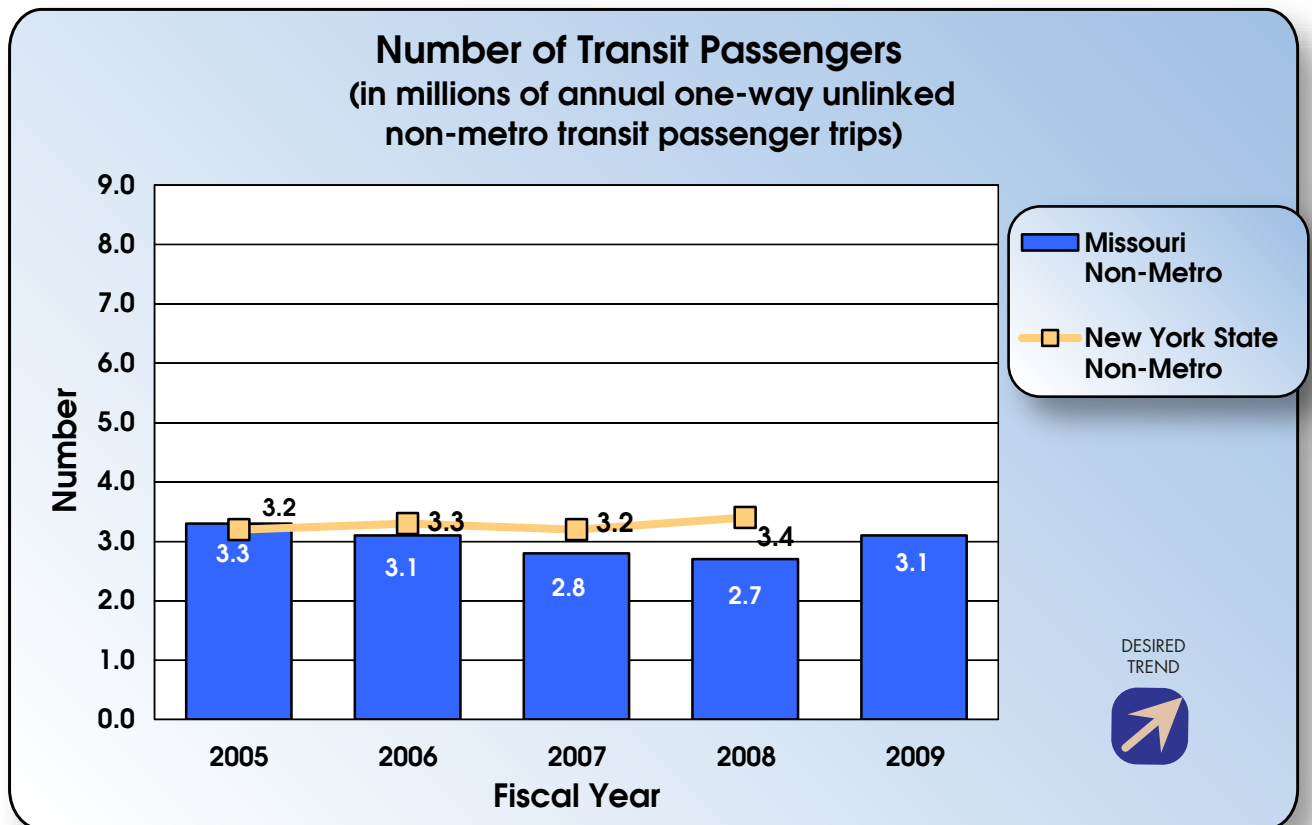
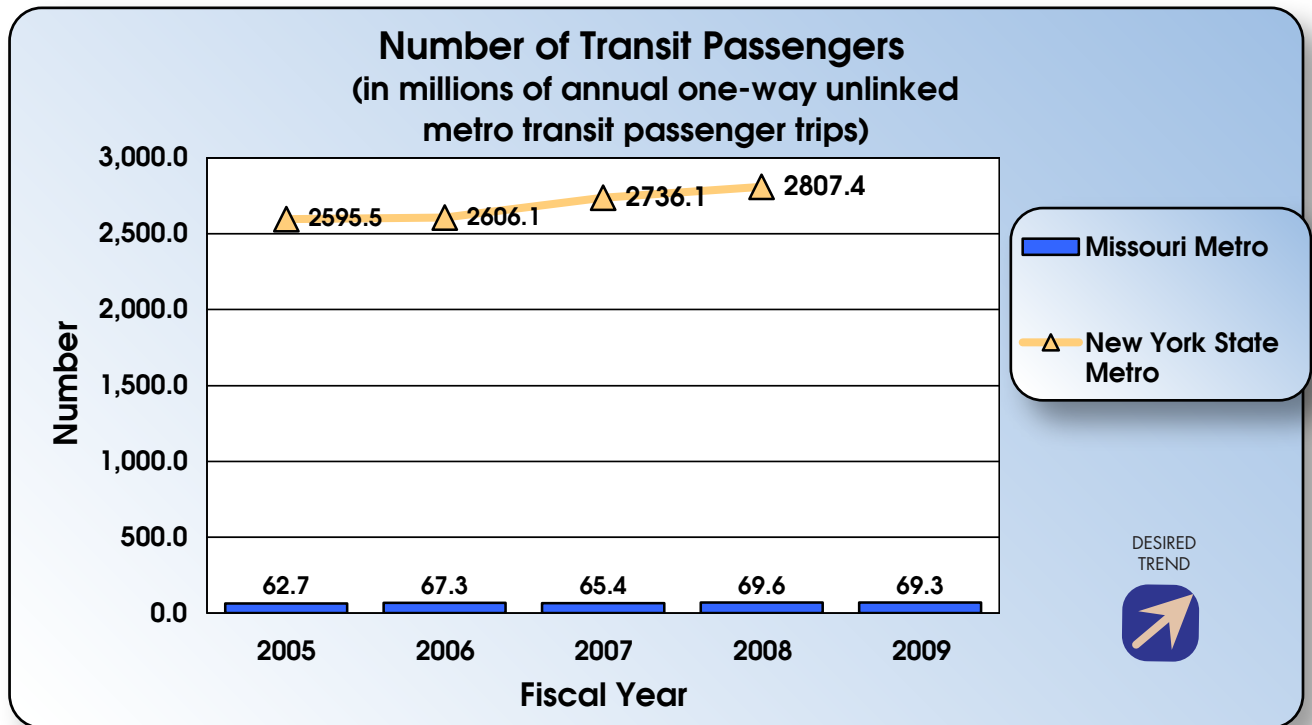
In 2009, Missouri's statewide metropolitan transit ridership decreased by 0.3 million one-way unlinked passenger trips compared to the previous year. Annual ridership increased in Kansas City, Columbia and Joplin, but declined in St. Louis, St. Joseph, Springfield and Jefferson City. Non-metro (rural)

ridership increased by approximately 0.4 million one-way unlinked trips in 2009. Transit systems experienced ridership gains in early state fiscal year 2009 (July 2008) when regular unleaded gasoline approached \$4.00 a gallon. However, several transit systems relying on local sales taxes for part of their funding saw a recession related decline in those revenues and cut transit services in the Spring of 2009 leading to decreases in passenger utilization.

Missouri compared 20 percent below New York State's non-Metro transit ridership in 2008. New York's rural population in the 2000 Census was 3.4 million or 100 percent greater than Missouri's rural population of 1.7 million. The New York benchmark data is for the calendar year. New York State's metro ridership vastly exceeded Missouri's metro transit ridership with just over 2.8 billion trips taken compared to 69 million metro transit passenger trips in Missouri for 2008. MoDOT worked with transit providers in developing the second Missouri Rural Transit Marketing Campaign.



## EASILY ACCESSIBLE MODAL CHOICES



## Average number of days per week rural transit service is available-12e

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Steve Billings, Administrator of Transit

### Purpose of the Measure:

This measure identifies the average existing public transit service in rural Missouri by indicating the availability of rural mobility services for employment, medical appointments and necessary shopping.

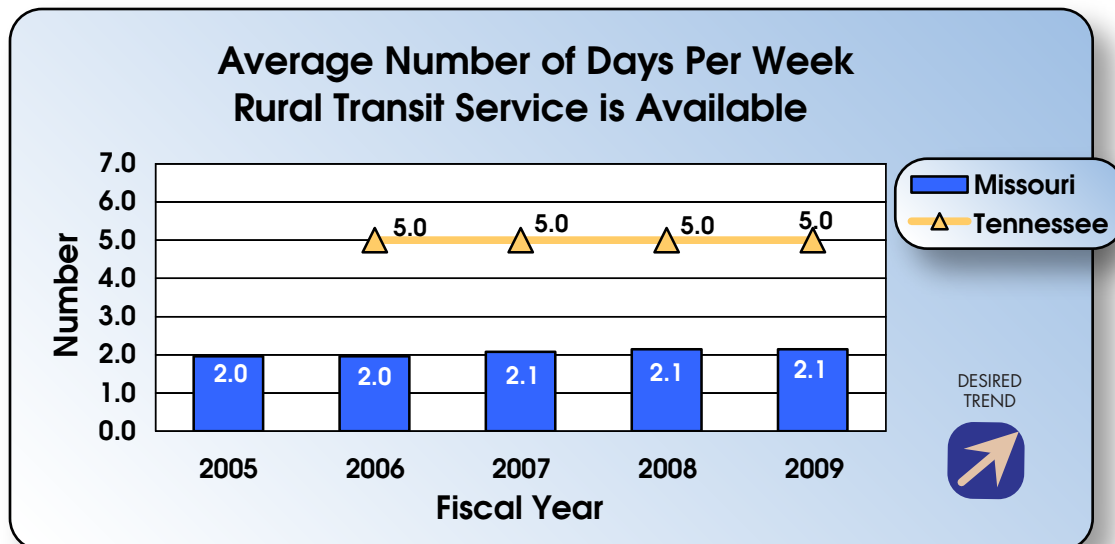
### Measurement and Data Collection:

To calculate the statewide average number of days per week rural transit service is available, MoDOT reviews published transit service schedules for each rural Missouri County and averages these daily frequencies within a week's schedule for available county-wide transit service. Rural transit agencies operate on an annual budget and customarily make transit service changes with the start of a new budget year. This is an annual measure with updates occurring in April. The measure is benchmarked to Tennessee, which has a comparable statewide population and some amount of transit service in every rural county as does Missouri.

### Improvement Status:

Rural transit service at a statewide average of two days per week is not sufficient to support full-time employment for its riders. For 2009, Tennessee deployed more days of rural transit service with five-day-a-week service, subject to available seating. Tennessee directs more state funding annually to rural public transportation (\$6.2 million vs. \$1.1 million in Missouri). Tennessee's transit providers also use pure demand-response dispatching compared to designated daily routes used by OATS and other Missouri providers. However in Missouri's rural transit providers together delivered 2.8 million trips compared to 1.5 million rural transit trips provided in Tennessee based on their most recent 2007 data.

MoDOT worked with rural transit systems to produce a second rural transit marketing campaign. MoDOT also procured rural transit intelligent transportation system design services to begin projects to increase transit service through scheduling efficiencies.





### Number of intercity bus stops -12f

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Steve Billings, Administrator of Transit

#### Purpose of the Measure:

This measure tracks the number of intercity bus stops. Intercity bus stops represent access points to intercity bus services provided in Missouri by Greyhound, Jefferson Lines, Burlington Trailways and Megabus. More stops among Missouri's 114 counties means greater access. Fewer stops create a barrier to access by requiring greater traveling distances in order to board an intercity bus.

#### Measurement and Data Collection:

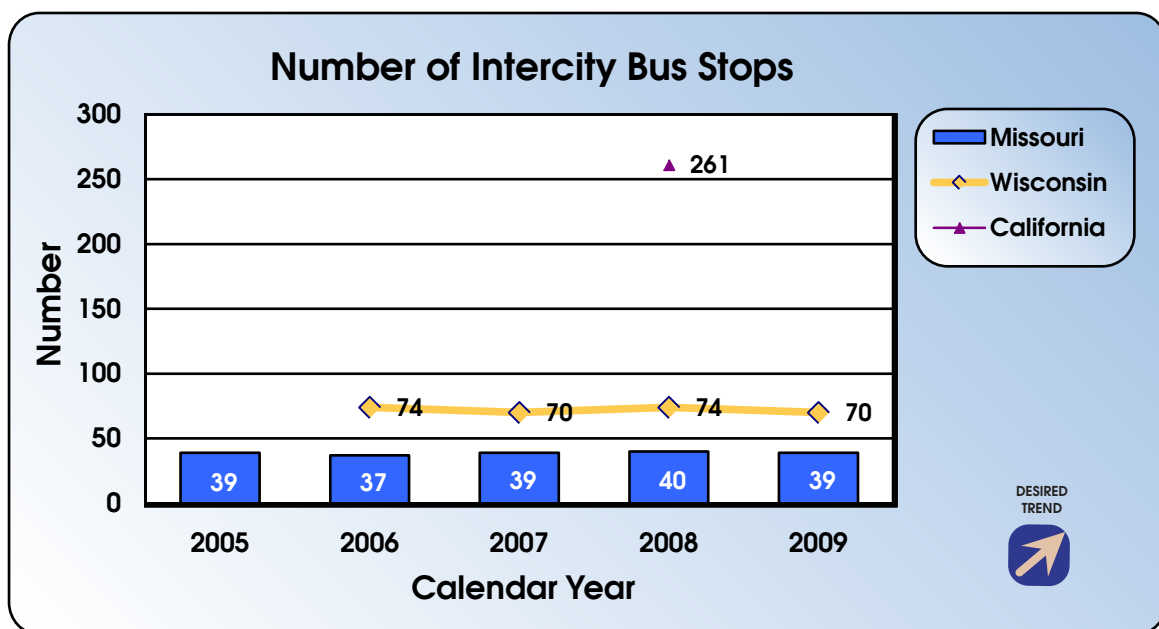
Data on the number and location of intercity bus stops is obtained annually from the national and regional intercity bus carriers. This is an annual measure with quarterly year-to-date updates of the most recent calendar year. The measure is benchmarked to Wisconsin, which has a comparable total statewide population. An additional benchmark to California was added for 2008 data.

#### Improvement Status:

The number of Missouri's intercity bus stops has stabilized after earlier reductions in Greyhound

service. Most of the recent incremental growth in Missouri's intercity bus service has increased the schedule frequency for cities already receiving service rather than creating new bus stops in unserved areas. Last year, Jefferson Lines moved the Lowry City stop to Collins and the Winston stop was dropped. Also, a route was discontinued in Wisconsin leading to the loss of seven stops there. The California bus stop data of 261 intercity bus stops is derived from a 2008 rural intercity bus study concluded that year.

A MoDOT-sponsored statewide intercity bus study has completed initial project meetings with corporate officers of Greyhound, Jefferson Lines and Burlington Trailways. These initial meetings explored the potential for increased intercity bus stops and increased intercity bus service in Missouri. February and August 2009 meetings of the Intercity Bus Study Advisory Committee recommended additional new corridors and stops for consideration.



## Number of rail passengers-12g

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Rod Massman, Administrator of Railroads

### Purpose of the Measure:

This measure tracks the number of people using the Amtrak train service in Missouri. This includes those taking a train trip in Missouri at any point within the state, which counts those riding on the state-supported passenger rail trains between Kansas City and St. Louis, the national trains that run through the state and the St. Louis-to-Chicago trains, most of which are supported by the state of Illinois.

For comparison purposes, the state of Washington's train data is shown based on the state's similar size, population and the fact that Washington has both national- and state-supported trains. Washington's "Cascades" train service is a model for the nation because the state invests millions of dollars in both infrastructure and operations every year.

### Measurement and Data Collection:

Amtrak provides the number of passengers per train in Missouri on a monthly basis. MoDOT's Multimodal Operations Division's Railroad Section then tabulates the numbers. Data is updated quarterly.

### Improvement Status:

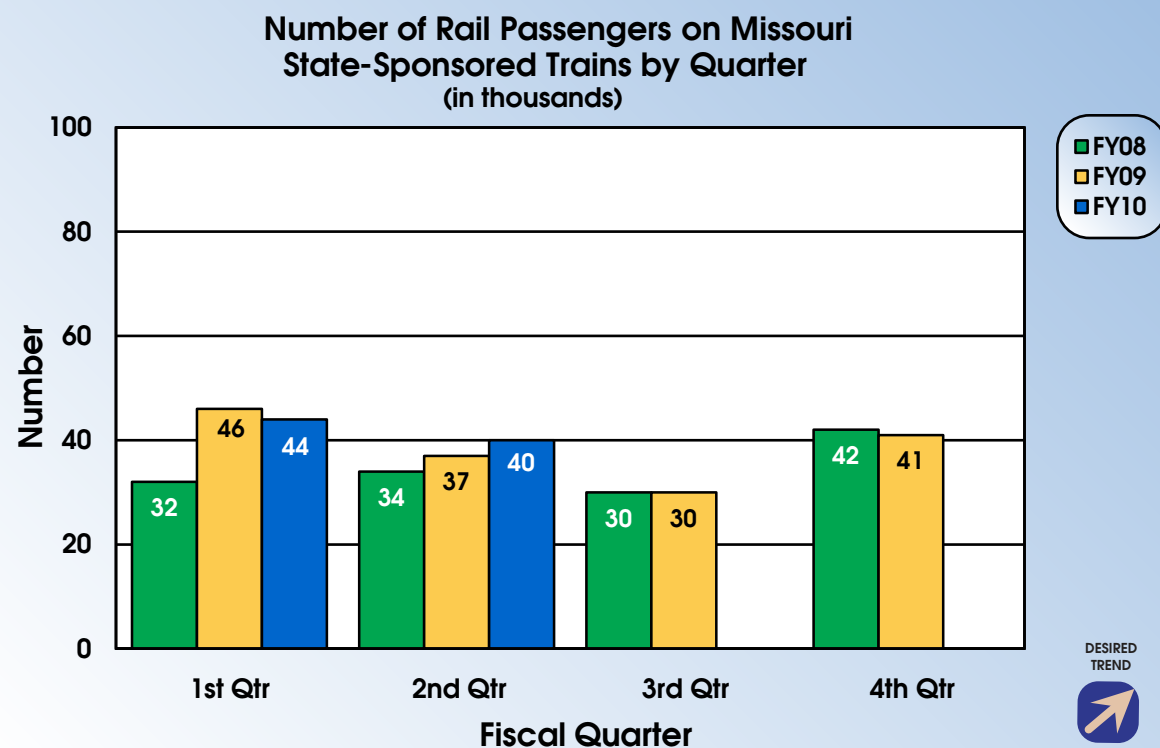
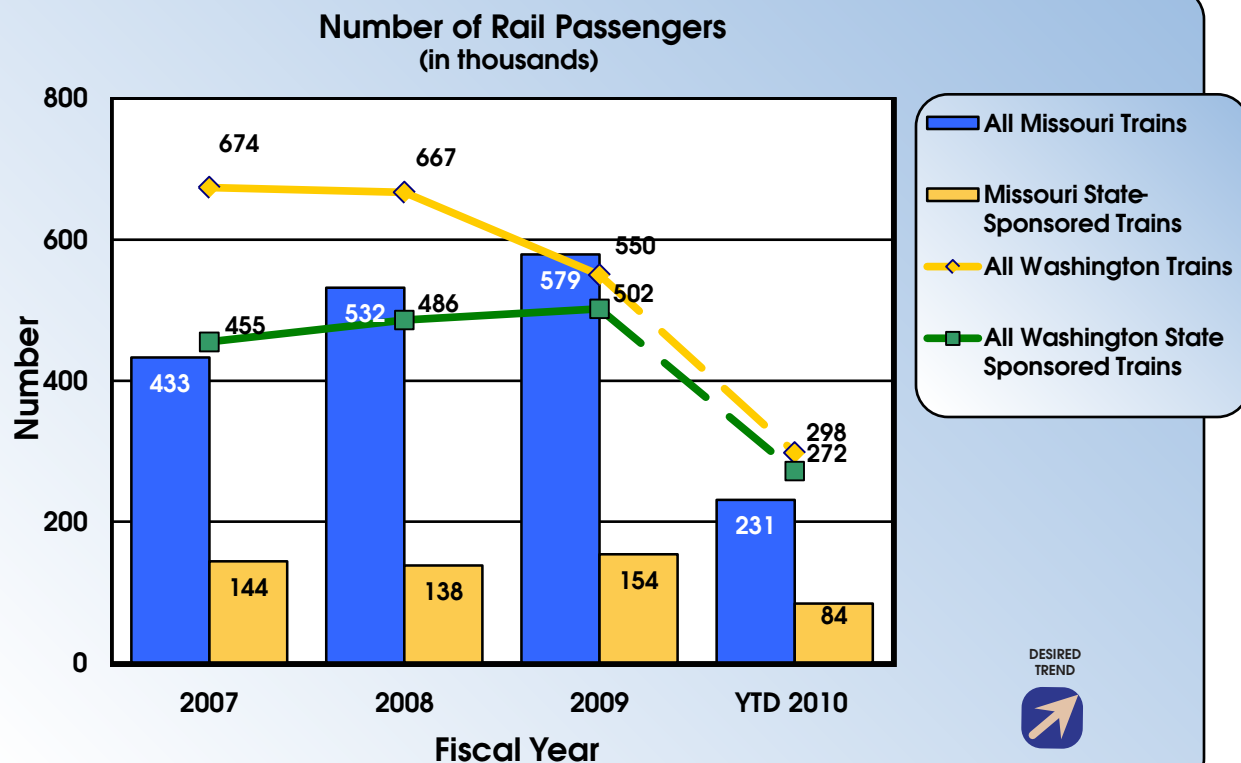
The months of October through December 2009 showed an increase of 8 percent over the same months in 2008 and for FY10, the total performance is 2 percent more than the figure for FY09. MoDOT continued its publicity efforts through new roadside signs, news releases, a wide-ranging distribution of train schedules and use of the department's dynamic message signs along the interstate system. These efforts, along with an increase in much better on-time performance – such as 89 percent in October, 96 percent in November and 93 percent in December – helped increase passenger numbers.

The track Amtrak operates on is owned by the Union Pacific Railroad and is a heavily used freight line with normally more than 50 trains a day. This makes it difficult to easily "flow" the trains for on-time

performance. In response to this continual problem, MoDOT commissioned a study for freight and passenger capacity improvements on the Union Pacific line between St. Louis and Kansas City. This study was completed in July 2007 and contained many options for infrastructure improvements along the line mostly between Jefferson City and Kansas City. The Missouri Highways and Transportation Commission approved the study. The Missouri Legislature provided \$5 million of new funding for infrastructure improvements in the 2008 budget. MoDOT also received a \$3.3 million match from the Federal Railroad Administration to complement these state funds for a total of \$8.3 million. Union Pacific began work on the California siding during May 2009, and the siding was completed on November 21, 2009. The dedication ceremony was held on December 8, 2009, with great fanfare. The siding began to be used immediately by trains and Thanksgiving week 2009 showed a 100 percent on time performance for all four trains.

The federal American Recovery and Reinvestment Act (ARRA) provides new funding possibilities for improving passenger rail service by targeting track infrastructure improvements that will increase fluidity and decrease delays. Applications filed by the August 24, 2009 due date includes sidings near Knob Noster, and a grade separation at Strasburg which relocates Route E and provides full use of a siding there, and universal crossovers at Hermann and Kirkwood and a second bridge over the Osage River. The new improvements, along with Union Pacific's improvements will profoundly impact the reliability of the service's performance. A second application filed on the October 2, 2009 due date requested \$50 million for new train equipment. The Federal Railroad Administration will announce the winners of the first round of applications during the winter of 2009-2010.

## EASILY ACCESSIBLE MODAL CHOICES



## Number of passengers and vehicles transported by ferryboat-12h

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Sherrie Turley, Waterways Program Manager

### Purpose of the Measure:

This measure tracks information regarding use of ferryboat services in Missouri.

### Measurement and Data Collection:

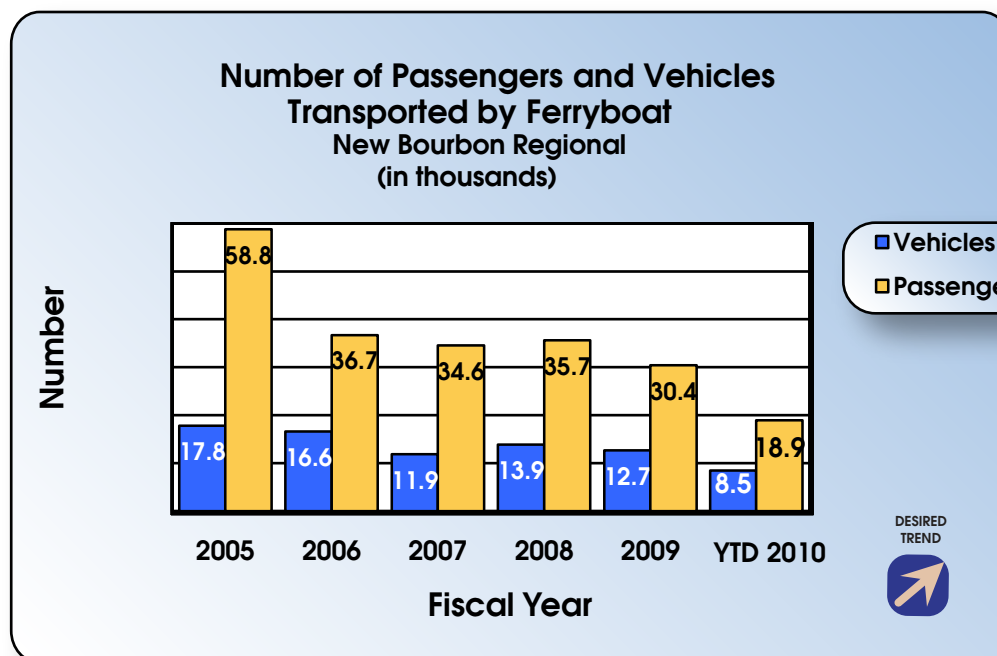
Missouri's two ferry services submit a monthly report that includes information on the number of passengers and vehicles, the cost for providing the service and the reasons for any service disruption. This measure is updated on a quarterly basis.

### Improvement Status:

The New Bourbon ferryboat operated 169 days in the first half of 2010 compared to 164 days in first half fiscal year 2009. The ferry transported 8,460 vehicles in the second quarter compared to 7,546 in 2009 for an increase of 12 percent. The number of passengers increased from 18,666 in the second quarter of 2009 to 18,917 in the same quarter of 2010 for an increase of 12 percent. Federal funds are being used to construct a high-water mooring for the ferry equipment. Construction will begin in February.

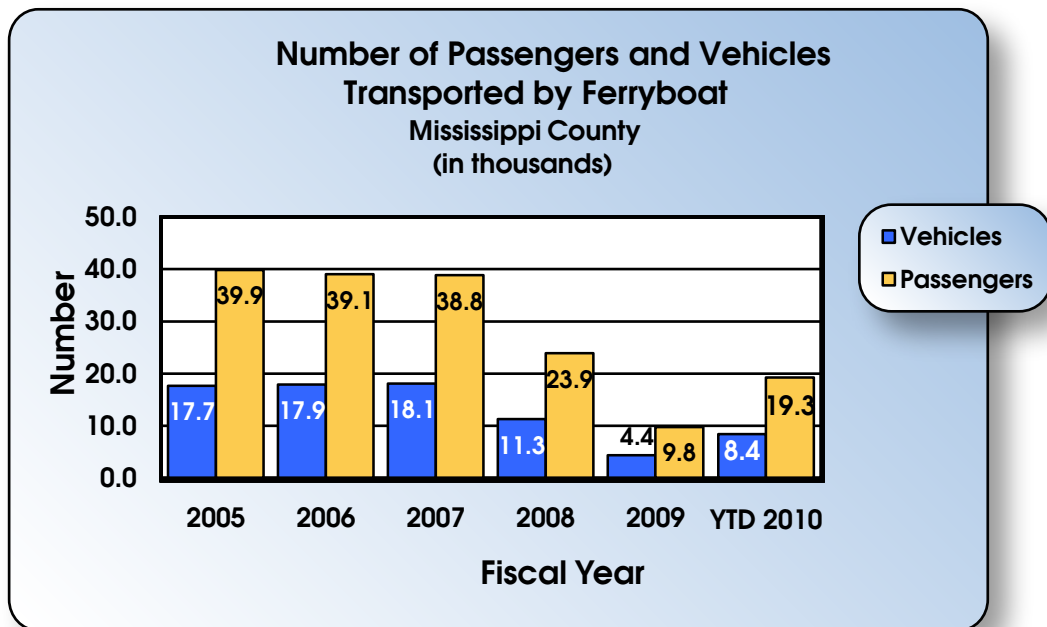
The Mississippi County ferryboat was closed during the first half of fiscal year 2009 so comparisons are made to fiscal year 2008. The service operated 173 days in the first half of fiscal year 2010 compared to 178 days in 2008. The ferry transported 8,402 vehicles in the second quarter of fiscal year 2010 compared to 9,391 vehicles in 2008 for a decrease of 11 percent. The number of passengers decreased from 20,189 in the second quarter of 2008 to 19,250 in 2010 for a decrease of 5 percent.

The Mississippi County Port received grant funding through the Federal Ferryboat Discretionary Program to install new engines and purchase a larger barge to increase capacity. Agreements have been signed and engineering services have been procured.





## EASILY ACCESSIBLE MODAL CHOICES



## State funding for multimodal programs-12i

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Lisa Hueste, Resource Management Specialist

### Purpose of the Measure:

This measure provides the history of state funding appropriated by the Missouri state legislature for multimodal programs that include transit, rail, air and waterways.

### Measurement and Data Collection:

This is an annual measure updated each July. State funding for multimodal programs is determined by the amount of revenue the state collects each year. MoDOT has several funds, including the General Revenue Fund, dedicated to multimodal programs for assisting Missouri citizens. The spending of funds throughout the fiscal year must be requested and authorized by MoDOT and the state legislature. The legislature may also authorize spending through bills filed by the General Assembly.

### Improvement Status:

The 2009 legislative session resulted in funding decreases for some of the multimodal programs due to a decline in revenues and switching state funding to federal funding. Overall, the programs received \$17.4 million for fiscal year 2010, a decrease of \$16.2 million from fiscal year 2009.

Transit funding remained constant for the Transit and Missouri Elderly and Handicapped Transportation Assistance programs for fiscal year 2010. Due to a decline in revenues, some General Revenue funding was switched to the State Transportation Fund.

State funding for rail decreased \$9.5 million from fiscal year 2009. Daily rail service provided by Amtrak was state funded in 2009 for \$8 million. For 2010, legislators increased this amount by \$1million and at the same time switched \$5.5 million to federal funding. In total, state funding for daily rail service in 2010 was approved for \$3.5 million. In addition, \$5 million for Amtrak capital improvement funding was reduced to reflect the second year of a two-year appropriation.

Waterways funding was reduced \$6.65 million to reflect the second year of a two-year appropriation for capital improvement funding for infrastructure development.

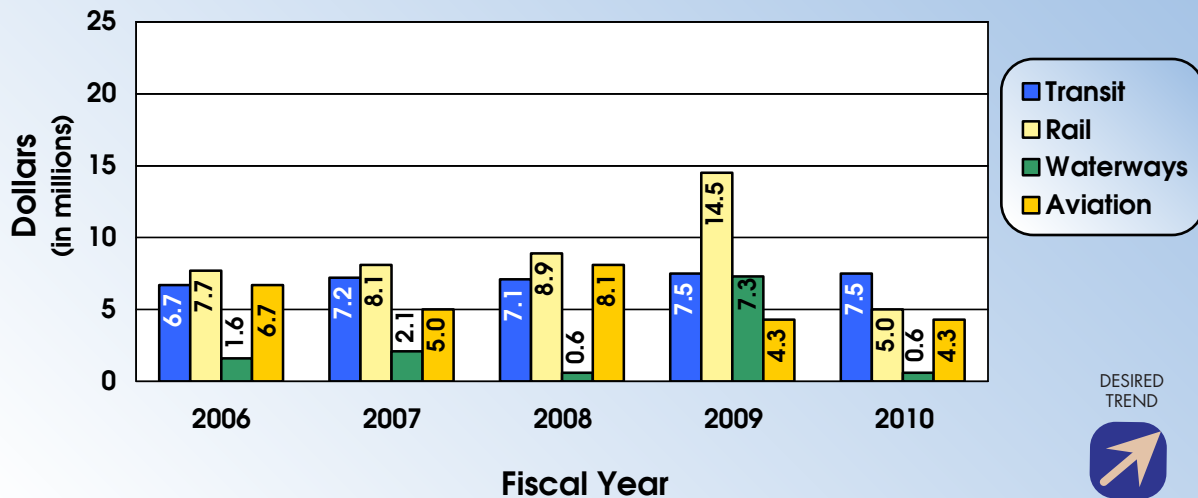
The aviation program will remain consistent with fiscal year 2009 aviation jet fuel tax collections. While legislation increased the cap amount from \$6 million to \$10 million during the 2008 legislative session, revenue for the aviation jet fuel tax has declined dramatically.

MoDOT continues to work with legislators to show the importance of how multimodal programs can effectively use state funds to improve economic development and provide needed services for Missouri's citizens.

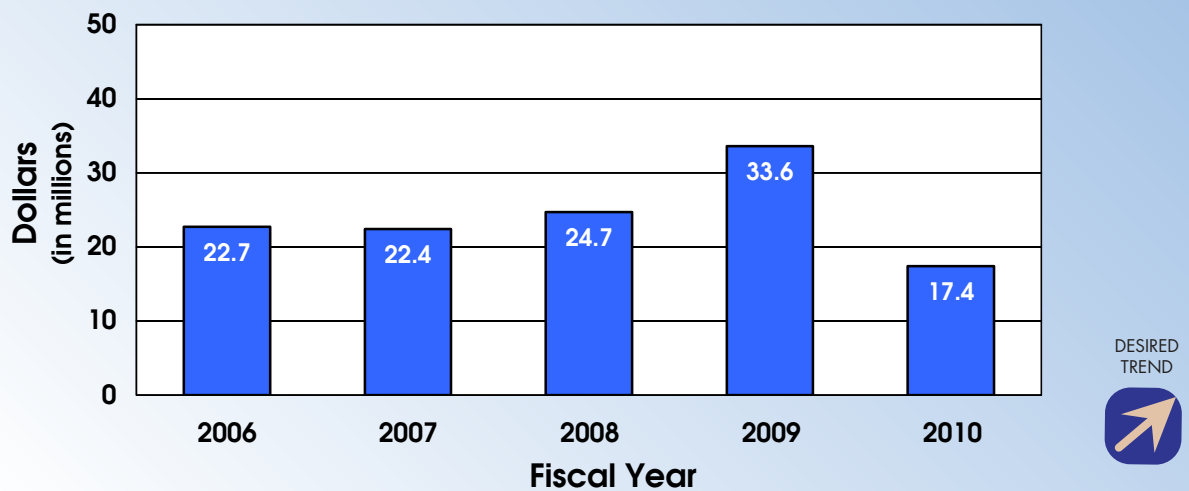


## EASILY ACCESSIBLE MODAL CHOICES

### State Funding for Multimodal Programs



### Total State Funding for Multimodal Programs



## Percent of customers satisfied with transportation options-12j

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Eric Curtit, Long-Range Transportation Planning Coordinator

### Purpose of the Measure:

This measure provides information about the public's perception of MoDOT's performance in providing transportation options other than Missourians' personal vehicle.

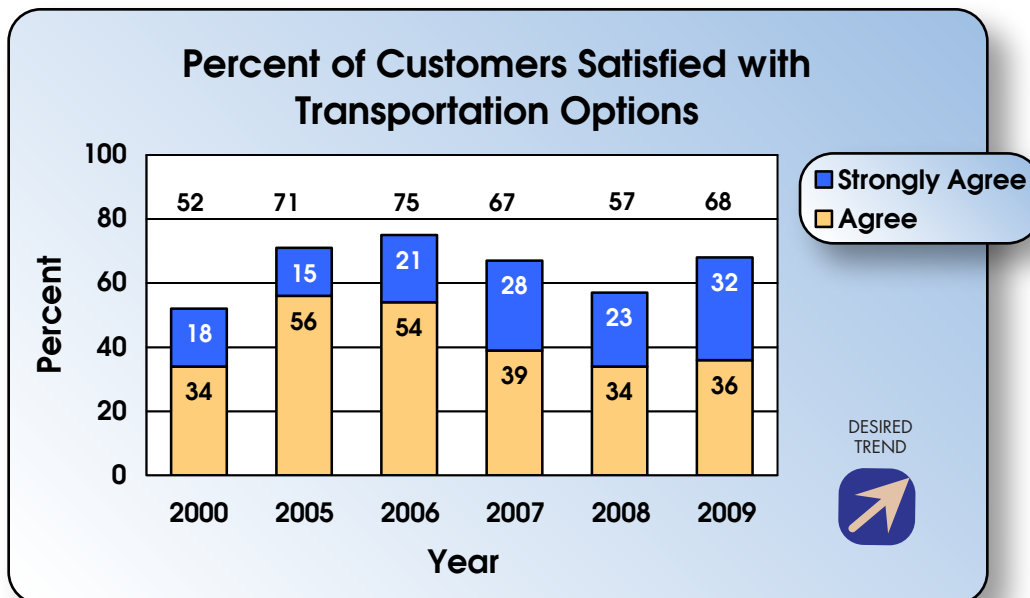
### Measurement and Data Collection:

This is an annual measure. Data is collected through a telephone survey each May from interviews of approximately 3,500 randomly selected adult Missourians with an overall margin of error of +/- two percent.

### Improvement Status:

Sixty-eight percent of MoDOT's customers are satisfied with transportation options in Missouri. This measure increased by 11 percent from last year's results. There was also a 9 percent increase in customers who strongly agree they are satisfied with transportation options.

The increase in satisfied customers between 2008 and 2009 can be attributed to several factors. First, MoDOT continues to place an emphasis on transportation improvements in all modes including increased services to public transportation, more reliable passenger rail service and port enhancements. MoDOT has also followed through on commitments as outlined in the Statewide Transportation Improvement Program, which increases satisfaction with customers. Also, gas prices rose to an all-time high in 2008. The gas prices then fell in 2009, so Missourians are more satisfied overall with transportation. For some of MoDOT's planning partners, an increase in funding through the American Recovery and Reinvestment Act has allowed for additional opportunities to enhance various modes of transportation at their discretion.





# High Impact Low Cost

Use high-quality materials  
on maintenance applications  
(e.g., top roads)

GET CONTRACTOR  
PLANS  
EARLIER

Identify  
EXPECTATIONS  
FOR  
ATC

HIGH IMPACT  
LOW COST

Use high-quality materials  
on maintenance applications  
(e.g., top roads)

Use high-quality materials  
on maintenance applications  
(e.g., top roads)

Use high-quality materials  
on maintenance applications  
(e.g., top roads)

Use high-quality materials  
on maintenance applications  
(e.g., top roads)

Use high-quality materials  
on maintenance applications  
(e.g., top roads)

Use compact for  
erosion control  
- Placed first and second  
layers in

Use high-quality materials  
on maintenance applications  
(e.g., top roads)

Use high-quality materials  
on maintenance applications  
(e.g., top roads)

Flexibility  
Schedule

Use high-quality materials  
on maintenance applications  
(e.g., top roads)

Use high-quality materials  
on maintenance applications  
(e.g., top roads)

GET CONTRACTOR  
PLANS  
EARLIER

# CUSTOMER INVOLVEMENT IN TRANSPORTATION DECISION- MAKING

*Tangible Result Driver – Dave Nichols, Director of Program Delivery*

MoDOT seeks out and welcomes any idea that increases its options, because the department doesn't have all the answers. The department creates and preserves a transportation decision-making process that is collaborative and transparent, involving its customers in the determination of needs right through to the development, design and delivery of projects.





## CUSTOMER INVOLVEMENT IN TRANSPORTATION DECISION-MAKING

### Number of customers who attend transportation-related meetings-13a

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Bob Brendel, Outreach Coordinator

#### Purpose of the Measure:

This measure gauges MoDOT's public involvement success – both in terms of public meetings and hearings that are held to make collaborative decisions with the general public, communities, elected officials, stakeholders, and in terms of public informational events scheduled by MoDOT to keep its customers advised of project status and potential impacts that could be experienced.

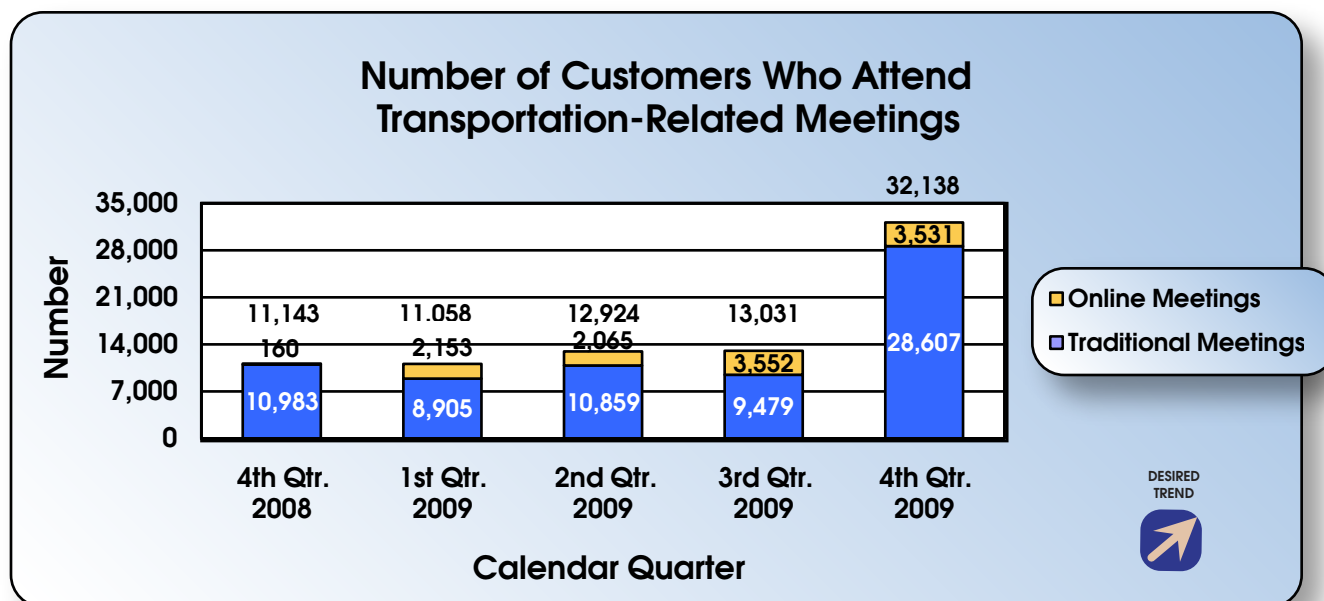
#### Measurement and Data Collection:

Attendance is determined by analyzing sign-in sheets used at public meetings or by head counts conducted by MoDOT staff. Participation in online meetings is

gauged by using “Web Trends” software. This measure is updated quarterly.

#### Improvement Status:

The surge realized in this measure in the fourth quarter of 2009 can be attributed to the 20,000 persons who attended the triumphant celebration of the reopening of I-64 in St. Louis. Also, 23 online meetings were held in the three-month period. Those online events had 3,531 participants compared to 466 who attended the corresponding traditional, face-to-face meetings.



## Percent of customers who are satisfied with feedback they receive from MoDOT after offering comments-13b

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Bob Brendel, Outreach Coordinator

### Purpose of the Measure:

This measure tracks MoDOT's responses to its customers. MoDOT routinely asks people who attend public meetings/hearings to submit comments that will be examined by the project team and will become part of the project's official record. It is important that people who avail themselves of this opportunity know that their comments are taken seriously.

### Measurement and Data Collection:

MoDOT routinely coordinates a survey for persons who attend project-specific meetings and hearings. The initial survey was sent to more than 4,500 persons who attended meetings in a five-year period. A survey process continues, with contacts made each time a project reaches the official public hearing milestone. This is an annual measure based upon a fiscal year, and data is analyzed twice each year.

### Improvement Status:

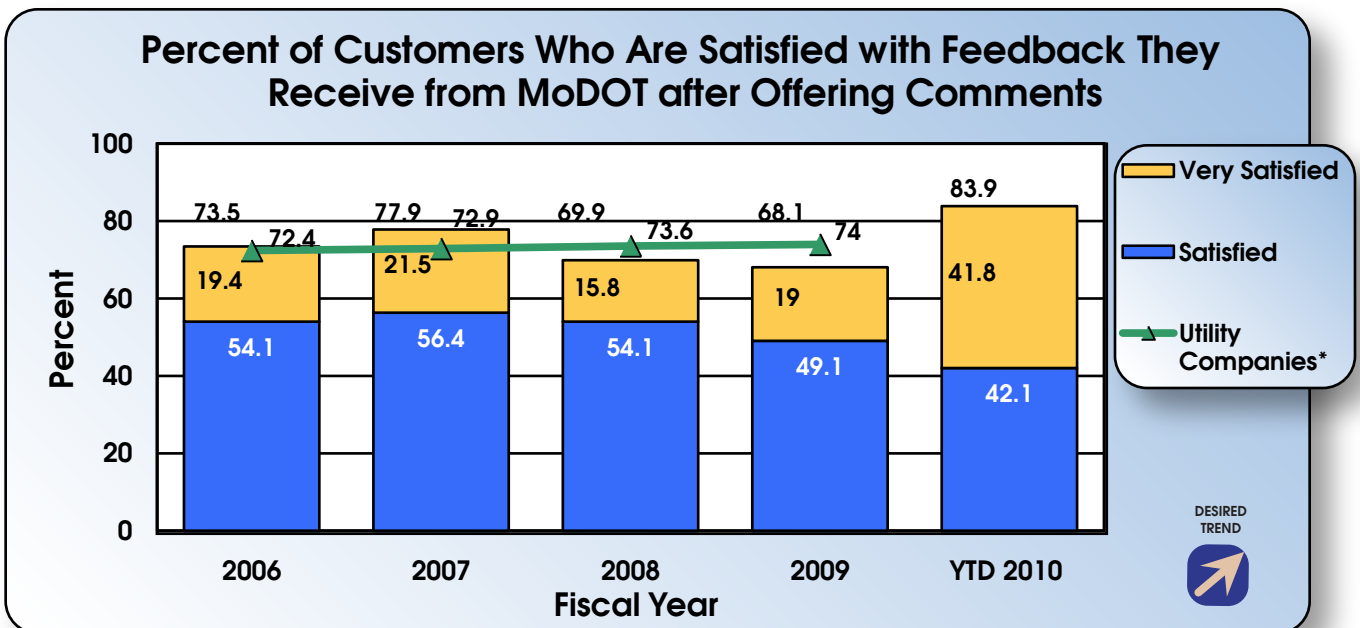
Thirty-six projects were surveyed across eight MoDOT districts (1-2-4-5-6-7-8-10) – a dramatic increase over the same period a year ago (11 projects across five districts) and this semi-annual result even

exceeded the annual total for fiscal years 2006, '07, '08 and '09.

The overall satisfaction with how MoDOT handled questions and comments was 83.9 percent – a 15.8 percent increase over FY2009 and the highest since the five-year baseline score of 66.7 percent was established in 2005.

The other two key indicators also improved compared to the previous year: 87 percent of the participants credited MoDOT with providing clear explanations and over three-quarters (77.6 percent) thought the decision-making process was open, transparent and fair.

The survey tool was modified in the last year to include space for written comments to give a better opportunity to understand customer concerns. Most respondents (74 percent) used this opportunity, and all comments were shared with the appropriate district.

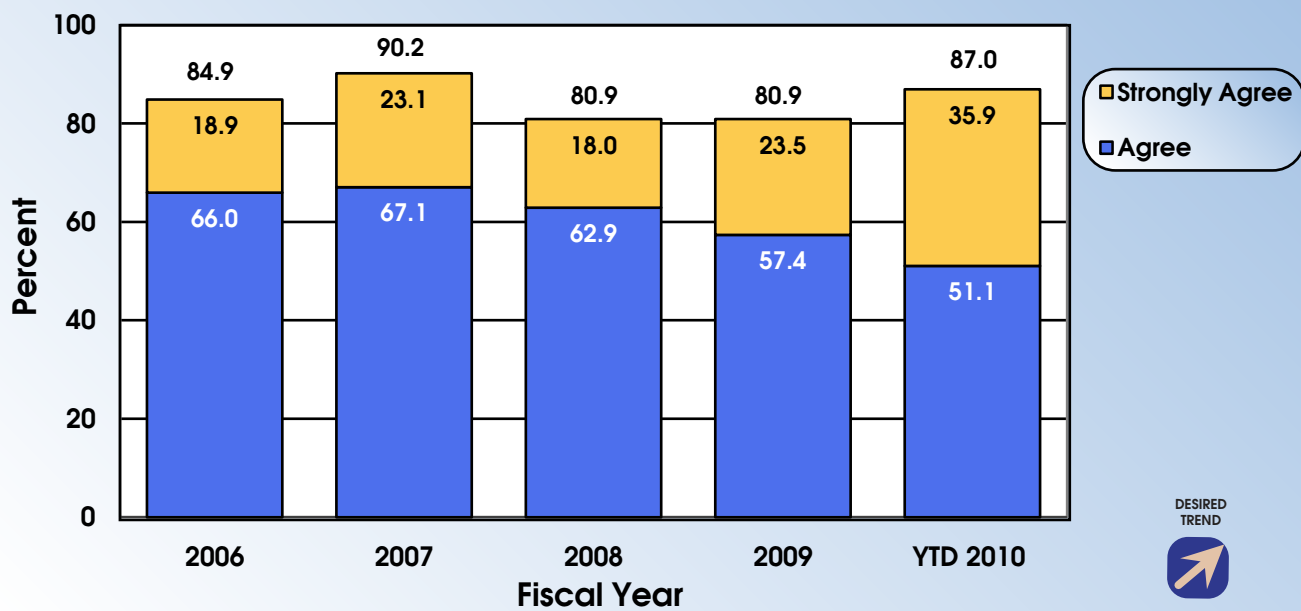


\*As measured by the American Customer Satisfaction Index.

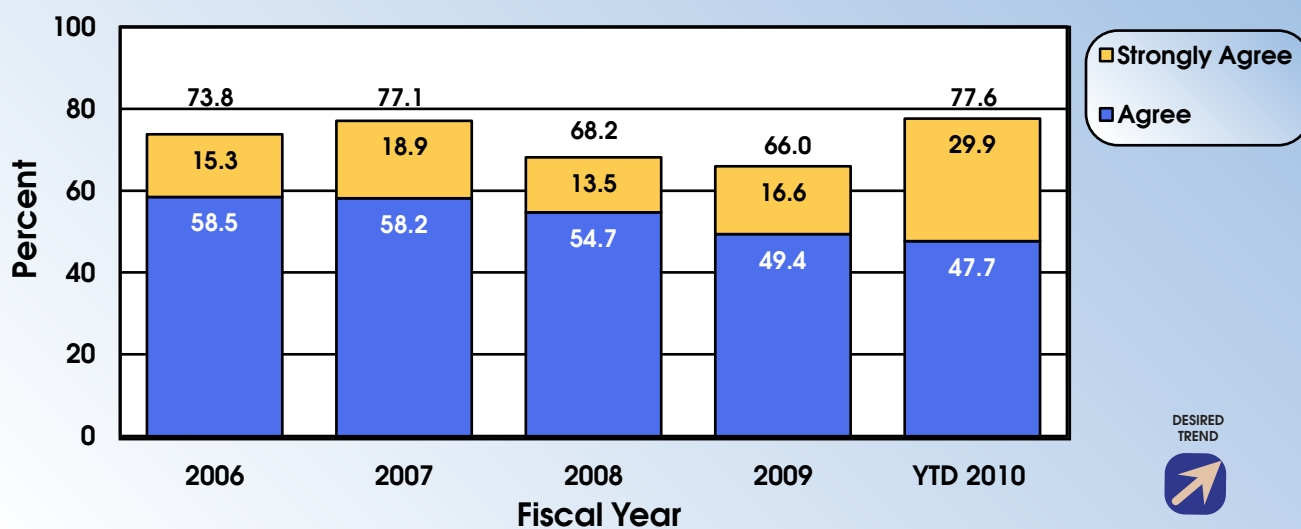


## CUSTOMER INVOLVEMENT IN TRANSPORTATION DECISION MAKING

### MoDOT Representatives Explained the Project and the Decision-Making Process in Such a Way that I Completely Understood It



### The Decision Making Process was Completely Open, Transparent and Fair



## MoDOT takes into consideration customers' needs and views in transportation decision-making-13c

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Sue Cox, Transportation Planning Special Projects Coordinator

### Purpose of the Measure:

This data helps determine the effectiveness of MoDOT's project planning outreach efforts.

### Measurement and Data Collection:

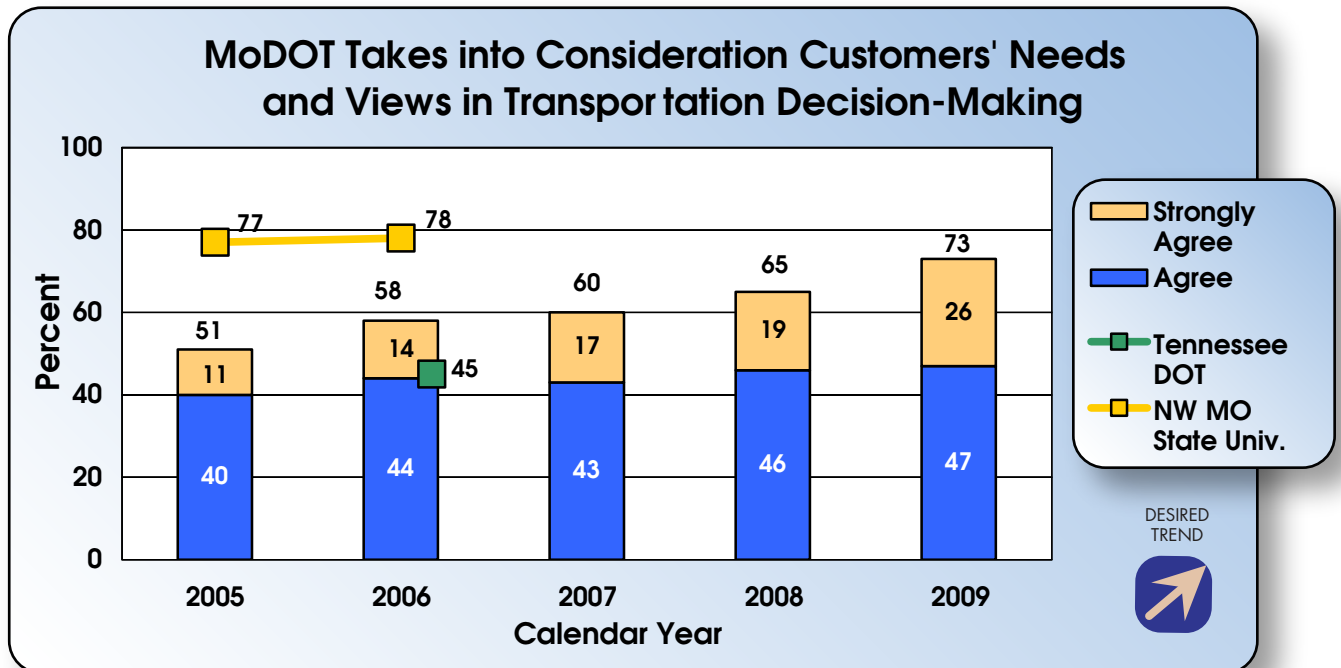
This is an annual measure, and this year's data, gathered from a statewide random telephone survey of approximately 3,500 Missourians, was collected in May 2009. A comparison is made to the Tennessee Department of Transportation, which also measures customers' perceptions regarding involvement in transportation decision-making. Tennessee DOT is in the process of updating its performance data.

### Improvement Status:

MoDOT learned in the 2009 customer survey that 73 percent of the survey sample feels MoDOT considers customer concerns and needs when developing transportation decisions. This is an increase of 8 percent, moving up from 65 percent in 2008.

Northwest Missouri State University is in the process of updating its 2006 measurement by surveying NMSU freshmen and juniors' satisfaction concerning student opportunities to provide input regarding student affairs at NMSU. The 2006 data is the most current information available.

To continuously improve in this area, MoDOT identifies additional opportunities to use techniques as outlined in the planning framework decision-making and public involvement process with local officials, planning partners, community leaders, elected officials and the general public. Media interviews, Web site publicity, news releases, newsletters, specific project surveys, public involvement surveys and community meetings continually provide new opportunities to interact with the public, share MoDOT's direction and discuss transportation priorities.



## CUSTOMER INVOLVEMENT IN TRANSPORTATION DECISION-MAKING

### Percent of positive feedback responses received from planning partners regarding involvement in transportation decision-making-13d

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Sue Cox, Transportation Planning, Special Projects Coordinator

#### Purpose of the Measure:

This measure tracks MoDOT's efforts to include statewide planning partners (members of metropolitan planning organizations and regional planning commissions) in transportation-related decision-making.

MoDOT's planning framework is a process used to ensure planning partners are able to influence transportation decisions regarding how transportation funds are spent in their areas. It is based on achieving informed consent rather than consensus. To continuously improve in this area, MoDOT focuses primarily on effective communication, and public involvement tools and techniques

#### Measurement and Data Collection:

Transportation Planning works with Organizational Results to administer an annual survey in January that evaluates planning partners' involvement in the transportation decision-making process for the previous year. The survey scale measures those who agree, strongly agree, disagree and strongly disagree.

#### Improvement Status:

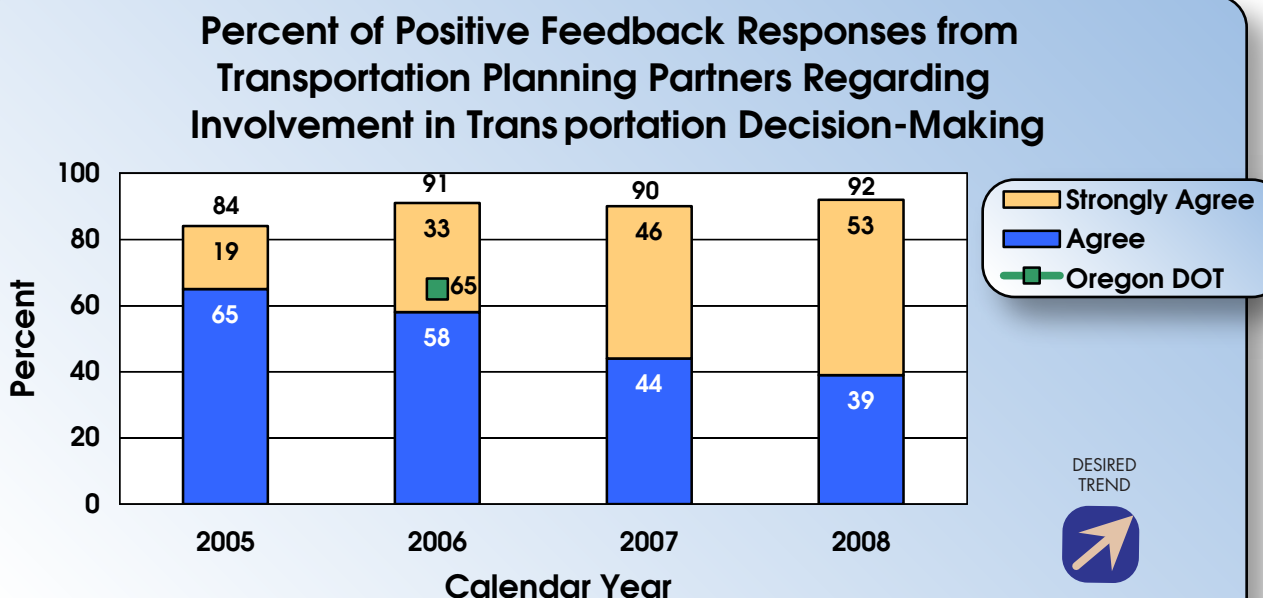
The 2008 survey received 77 responses from 158 distributed e-mails resulting in a 48.7 percent response rate. The percent of strongly agree answers increased from 46 percent in 2007 to 53 percent in 2008. The

survey focuses on feedback regarding the overall involvement of planning partners in the planning process rather than on individual MoDOT outreach activities.

Feedback helps MoDOT learn new ways to achieve better involvement, fine-tune communication and try out ideas. This past year, survey improvements, including content adjustments and distribution processes, resulted in helpful feedback and a strong response rate. Survey results were shared with planning partners and co-efforts were initiated to act on concerns, solve problems and provide clarifying information.

Transportation Planning also worked with each district to assess how the process works in the field. The strengths and weaknesses of the planning outreach process, the improvement areas and the best practices were identified. An action team is reviewing the information and selecting priorities for implementation.

For comparison purposes, the Oregon Department of Transportation measured a similar involvement in 2006 – indicating 65 percent of all respondents involved in transportation planning felt their involvement in decision-making was effective; however, Oregon reports it will not update this data again until 2011.



*(This page is intentionally left blank for duplexing purposes)*



A photograph of a roadside rest area. In the background, there is a large, single-story building with a grey tiled roof and several large columns supporting a covered entrance. To the left of the building is a picnic shelter with a similar tiled roof. A paved parking lot in the middle ground contains several vehicles, including a green van, a black SUV, a silver sedan, a red pickup truck, and a white car. A few people are visible near the vehicles. The foreground is dominated by a grassy area with tall, dry, brownish grass. The sky is clear and blue. A large, dark blue curved shape is in the top left corner, and a black curved shape is in the top right corner.

## CONVENIENT, CLEAN AND SAFE ROADSIDE ACCOMMODATIONS

*Tangible Result Driver – Don Hillis, Director of System Management*

Many Missouri motorists depend on roadside parks and rest areas during their travels for the opportunity to rest and refresh themselves in a safe environment. Providing safe, clean and convenient accommodations allows motorists to travel more safely and comfortably.







### Percent of customers satisfied with rest areas' convenience, cleanliness and safety -14a

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Jim Carney, State Maintenance Engineer

#### Purpose of the Measure:

This measure helps MoDOT understand customer expectations concerning the convenience, cleanliness and safety of its rest areas. This information will provide insight to rest area location, lighting and security as well as the overall cleanliness expectations.

#### Measurement and Data Collection:

MoDOT measures this attribute with both internal and external data collection. MoDOT receives information from a survey card offered at all rest areas. The survey card asks a variety of questions with three of the questions specifically asking if the rest area is convenient, clean and safe. This provides direct input from our customers and is considered the external source. All comments from the cards are sent to the districts and sheltered workshop contractor to ensure concerns are addressed in a timely manner.

To ensure customer satisfaction, all rest areas are inspected using an attribute list developed and based on an industry-wide literature review. The attribute list includes characteristics rest-area users identified as what they consider convenient, clean and safe. MoDOT maintenance employees inspect all rest areas and the work of the sheltered workshop contractor at least two times per month using this list and are considered the internal source.

MoDOT works with Extended Employment Sheltered Workshops to provide the cleaning at all 19 rest areas in the system. The sheltered workshop employees provide this service 365 days a year, many from early morning (6 a.m.) to late in the evening (10 p.m.). This measure is updated quarterly.

#### Improvement Status:

The rest area survey cards were first made available in May 2005. A total of 6,835 were returned in fiscal year 2009 compared to 9,774 cards in fiscal year 2008, 8,178 in fiscal year 2007 and 8,054 in fiscal year 2006. In the second quarter of fiscal year 2010, 3,188 cards were returned, a significantly higher

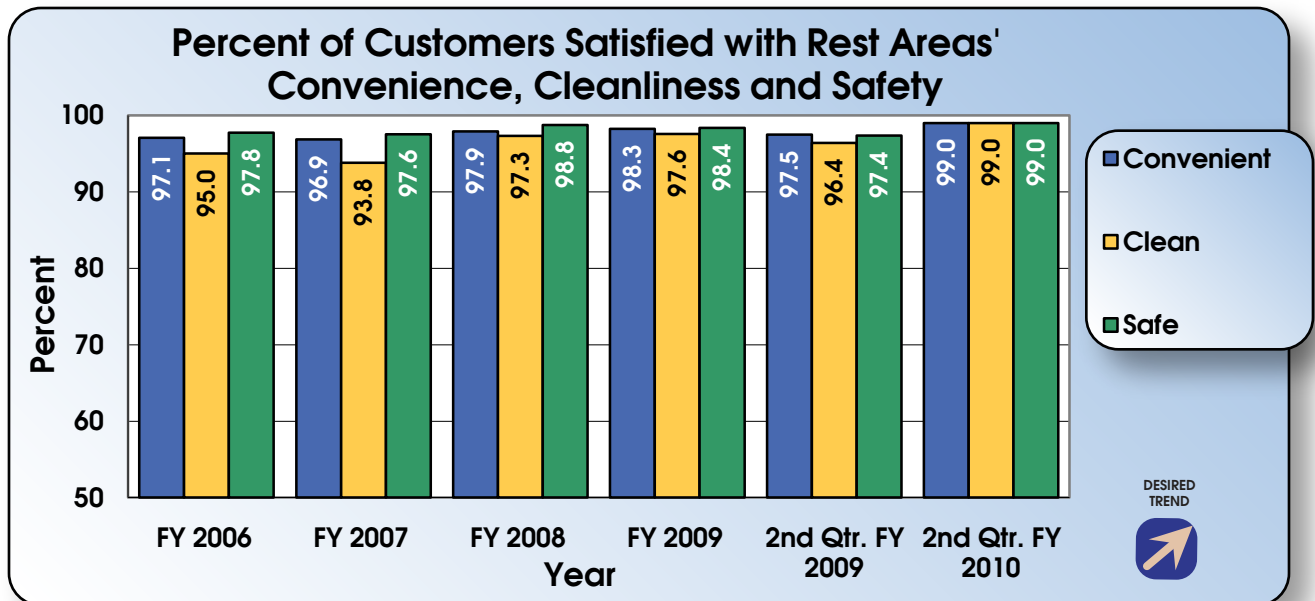
number of returned surveys than in the second quarter of fiscal year 2009. The Conway Welcome Center reopened on May 4, 2009, and is the primary reason for the increase in survey cards, accounting for over 61 percent (1,947) of the cards in this quarter.

- Second Quarter fiscal year 2009, 911 surveys received
- Third Quarter fiscal year 2009, 594 surveys received
- Fourth Quarter fiscal year 2009, 3,120 surveys received
- First Quarter fiscal year 2010, 6,838 surveys received
- Second Quarter fiscal year 2010, 3,188 surveys received

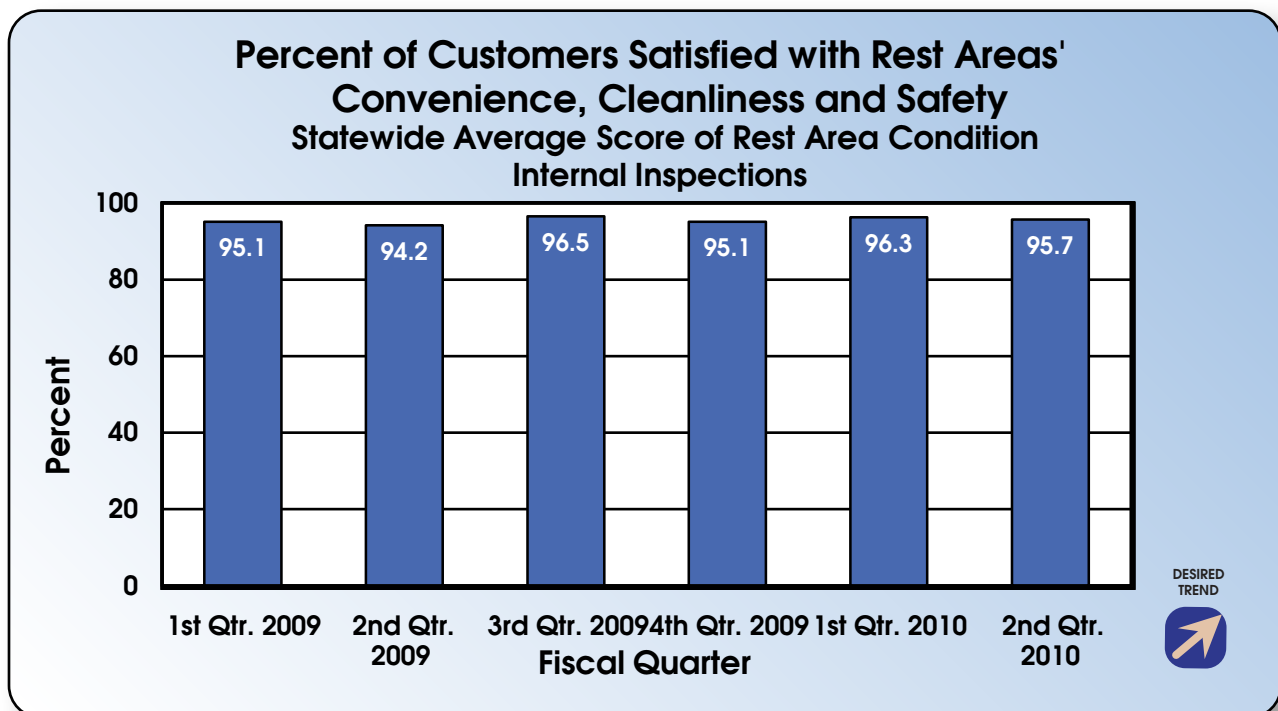
Customer satisfaction for the three attributes is the same in all of the factors when compared to the previous quarter. All three attributes hit the 99 percent level for the second consecutive quarter and are significantly higher than the same quarter last year. The Doolittle site is converted to "truck parking only" as part of the overall rest area plan. The Steele Rest Area closed this quarter for road construction work in the area. This reduced the number of rest areas to 17 statewide. MoDOT implements actions to improve the cleanliness at rest areas with lower satisfaction ratings by direct contact with the responsible contractor and district personnel. Cards were returned from 49 states, Canada, Ireland, the United Kingdom, Switzerland, Mongolia, China and Spain.

MoDOT is doing extremely well at meeting the customers' expectations for convenient, clean and safe facilities; largely in part to these inspections conducted a minimum of two times per month. The inspection scores decreased slightly from 96.3 percent to 95.7 percent for the second quarter of fiscal year 2010. MoDOT takes care of maintenance concerns in a timely manner to keep the rest areas open for use.

## CONVENIENT, CLEAN AND SAFE ROADSIDE ACCOMMODATIONS



Note: Rest area customer satisfaction benchmarks are limited. Florida's 2007 rest area customer survey results found: 80 percent said the rest areas were clean, 72 percent said there were enough rest areas and 84 percent said the rest areas were safe. New Mexico has a benchmark of 95 percent in their efforts to monitor rest area satisfaction and reached a level of 96 percent for FY08.





### Percent of customers satisfied with commuter lots' convenience, cleanliness and safety -14b

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Tim Chojnacki, Maintenance Liaison Engineer

#### Purpose of the Measure:

This measure will help the department understand customer expectations concerning commuter lot convenience, cleanliness and safety. This information will provide insight to location, lighting and security at commuter lots as well as their overall cleanliness.

#### Measurement and Data Collection:

MoDOT receives information in the form of survey cards distributed by MoDOT employees at 25 commuter lots. The survey contains a variety of questions, three of which specifically ask if the commuter lot is convenient, clean and safe. This is a baseline measure that provides direct input from the department's customers and is considered an external source. This is an annual measure updated each January.

To further assess conditions and ensure customer satisfaction with the commuter lots, all lots are inspected based on attributes identified in an industry-wide literature review as to what commuter lot customers consider convenient, clean and safe. MoDOT maintenance employees inspect all commuter lots each quarter. This measure is updated quarterly.

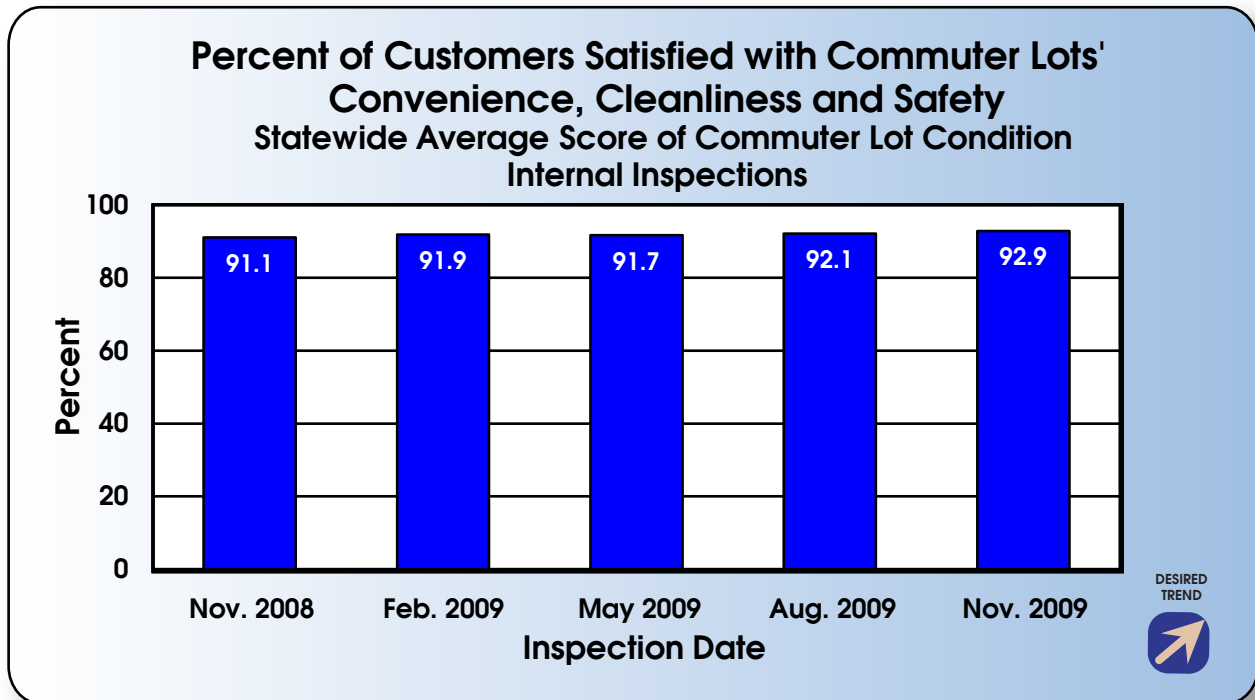
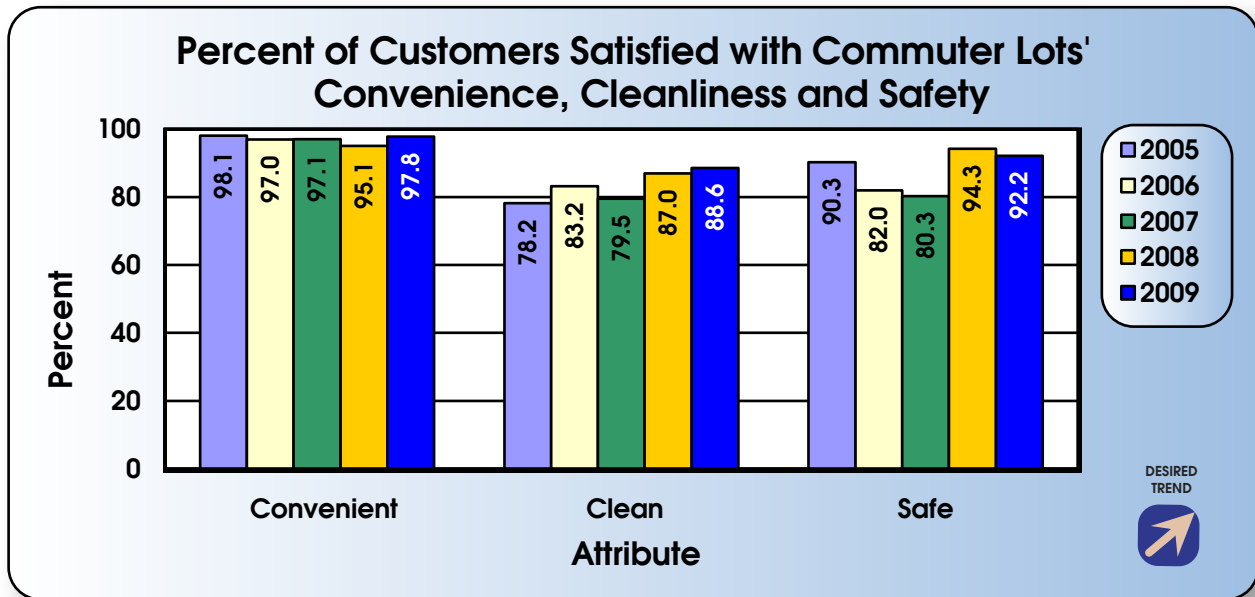
#### Improvement Status:

Survey cards were distributed at 25 commuter lots to 986 customers in November and December of 2009 and the department received 279 responses. 98 percent of the customers thought the lots were convenient with 73 percent using them at least five days per week. 81 percent cited saving fuel costs as the most important reason to use the lot, with being good for the environment and the cost of parking at the destination being other considerations. 89 percent of the customers were satisfied with cleanliness of the lots compared to 87 percent in 2008. 92 percent of customers were satisfied with safety at the lots compared to 95 percent in 2008. While this is a slight decrease from 2008, customer satisfaction with safety is higher than earlier surveys.

The quarterly inspections provide input to district maintenance supervisors on work needed at the commuter lot for condition of signs, parking lot surface, litter, and vegetation management. The November 2009 inspections showed the statewide average condition improved slightly, 92.9 percent compared to 92.1 percent the previous quarter.



## CONVENIENT, CLEAN AND SAFE ROADSIDE ACCOMMODATIONS



### Number of users of commuter parking lots-14c

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Tim Chojnacki, Maintenance Liaison Engineer

#### Purpose of the Measure:

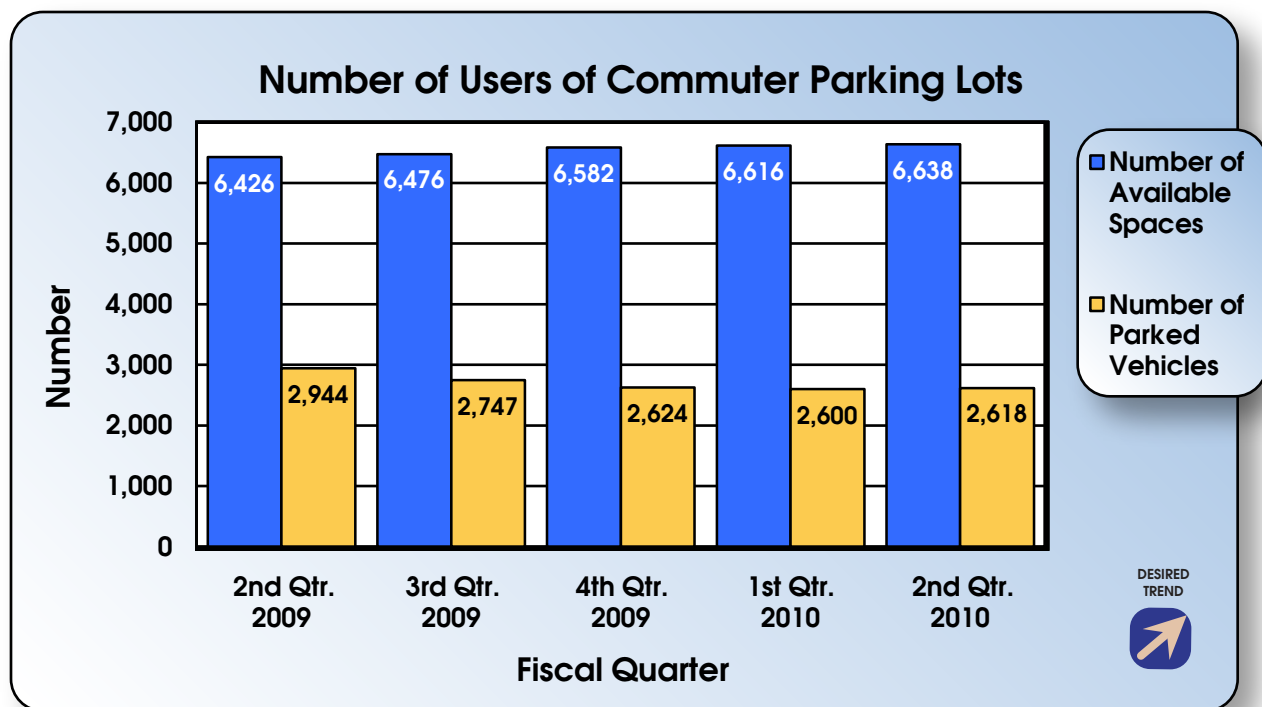
This measure tracks the number of commuter parking lot users. It will help the department determine whether its commuter parking lots are adequate at current locations and whether lots are fulfilling the needs of the traveling public.

#### Measurement and Data Collection:

District maintenance personnel count the number of vehicles parked in each commuter lot in conjunction with the quarterly condition inspections. Data is collected from every district to create a statewide report. This measure is updated quarterly.

#### Improvement Status:

There was a slight increase in the number of available spaces and the number of parked vehicles this quarter. The number of available spaces statewide is 6,638 at 113 lots. The number of available spaces increased due the opening of one new lot located at I-55 and Route M in Perry County. The number of parked vehicles increased slightly from 2,600 last quarter to 2,618 this quarter. As confirmed by the customer surveys, gas prices are the biggest reason people choose to use the commuter lots. District and Central Office staffs continue to work on strategies that were developed by a statewide team to improve the condition and usage at the commuter lots.



### Number of users of rest areas -14d

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Stacy Armstrong, Roadside Management Supervisor

#### Purpose of the Measure:

This measure tracks the number of vehicles visiting rest areas. This information helps MoDOT better understand the peak days and times visitors use rest areas, impacting staffing decisions. MoDOT estimates the rest areas have more than 20 million visitors each year.

#### Measurement and Data Collection:

Rest areas at Bloomsdale and Steele on I-55, Concordia, Wright City and Boonville on I-70, Eagleville and Lathrop on I-35, Dearborn and Rock Port on I-29, and St. Clair, Conway, and Joplin on I-44 have permanent counters providing data daily. Pavement sensors send data from a solar-powered wireless transfer station. All data is from permanent counters. The counts are for the average seven-day period between October 1 and December 31. This data is updated quarterly.

#### Improvement Status:

Permanent counters are transferring data from 12 different rest areas located throughout the state rest area system. Currently the software program is being upgraded. The Steele Rest Area is closed due to limited access because of road construction on I-55 and the conversion of the southbound side to truck parking. Data for Dearborn and Conway were not

available for the same period last year to compare totals.

The number of users in the first graph is the weekly average for each of the 11 sites. The weekly average is determined by adding the grand totals for each individual site for the quarter, dividing by the number of days in the quarter (92 for this quarter) and multiplying by seven for the weekly total.

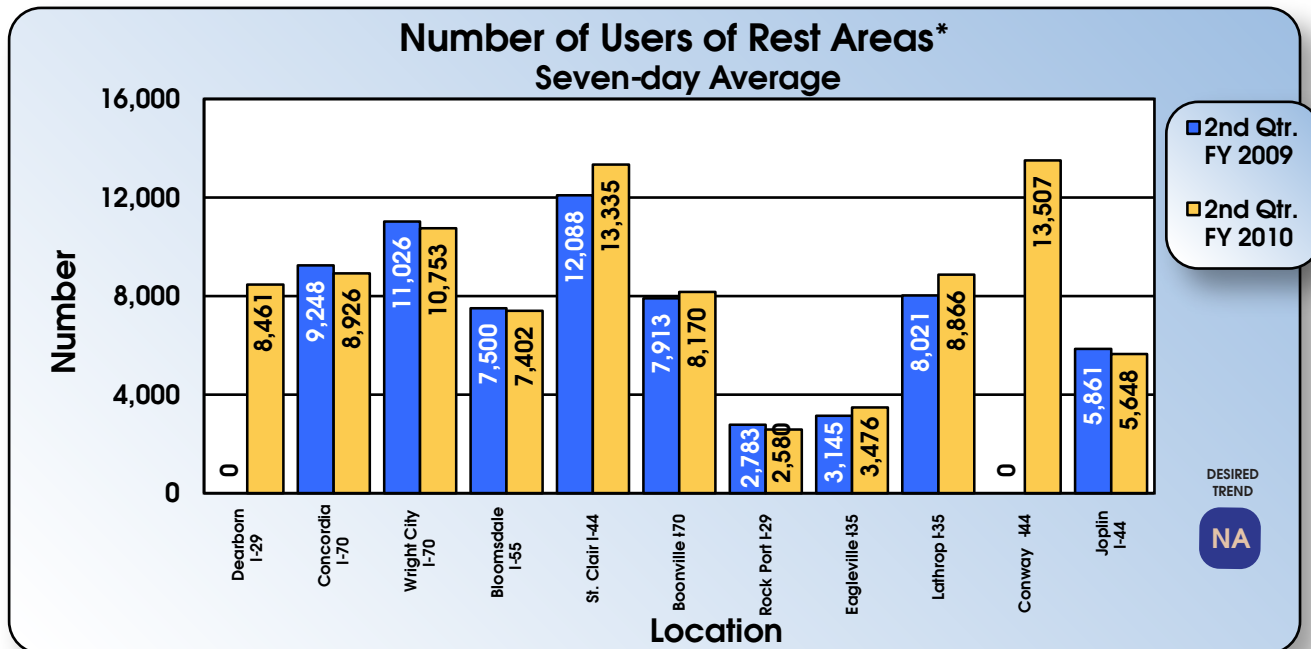
The second graph provides the total number of visitors for the 11 sites for each individual day of the week of the quarter. Friday continues to be the busiest day at the rest areas.

The permanent counters were operational at 11 of the 17 rest areas this quarter. A total of 1,197,642 vehicles were counted at those rest area sites. Using the average vehicles per rest area data from the 11 sites, it is estimated that 1,850,901 vehicles used Missouri rest areas this quarter. Using a conservative estimate of 2.5 passengers per vehicle, the rest areas had approximately 4,627,252 visitors for the quarter. Based on quarterly averages, Missouri rest areas will provide service to well over 18 million annual visitors. The first and fourth quarters of the fiscal year traditionally have the highest visitor count.

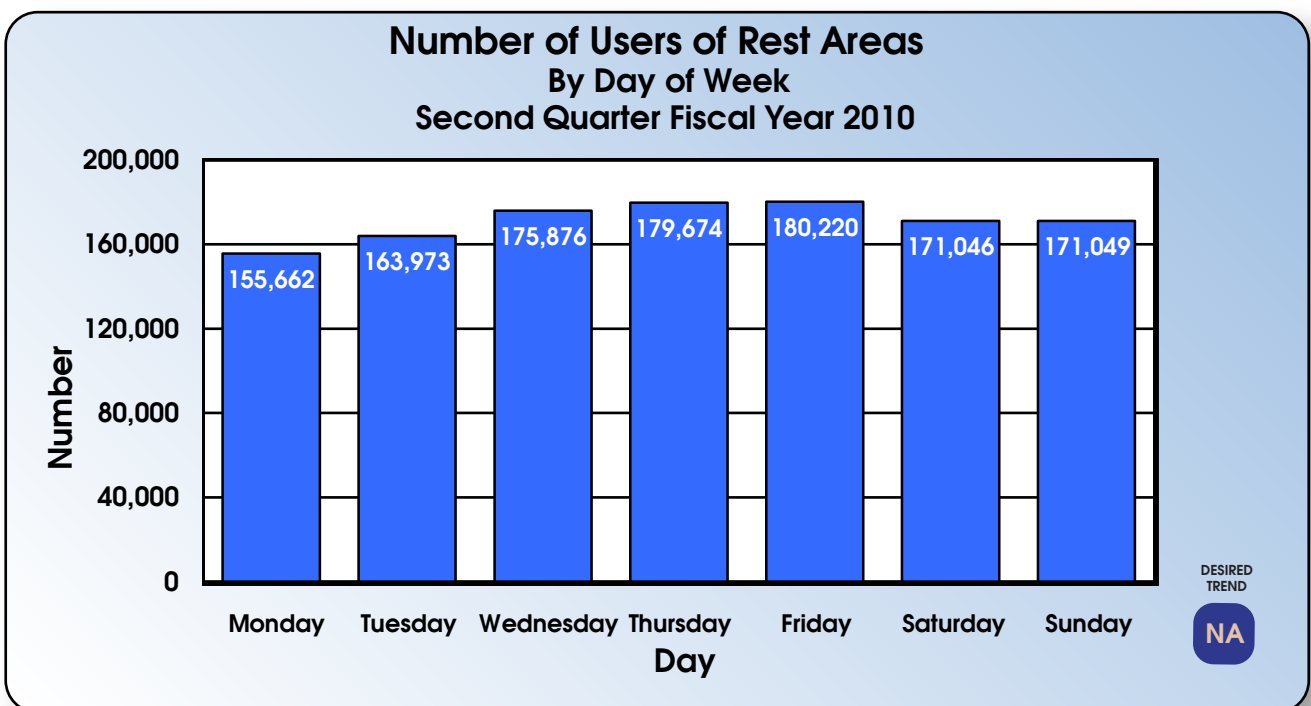




## CONVENIENT, CLEAN AND SAFE ROADSIDE ACCOMMODATIONS



\*Concordia, Wright City, Dearborn, Bloomsdale, Boonville, St. Clair, Lathrop and Conway are two directions and provide counts from both sides. Rock Port, Eagleville and Joplin are one direction only.



## Number of truck customers that utilize rest areas -14e

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Tim Jackson, Maintenance Liaison Engineer

### Purpose of the Measure:

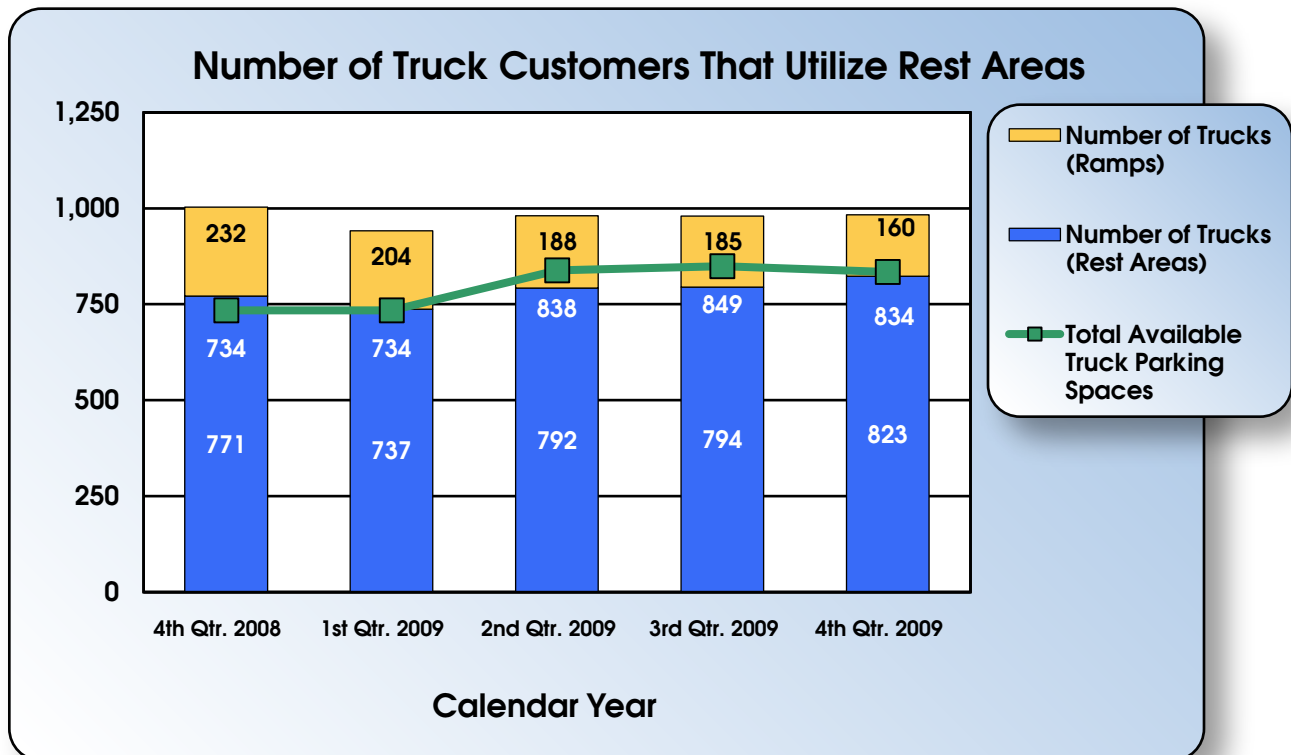
This measure tracks the number of trucks at rest areas, welcome centers and truck parking facilities. The number of trucks using the rest areas and the nearby ramps could be used to help determine how many spaces are needed to provide convenient parking facilities at each rest area.

### Measurement and Data Collection:

On a monthly basis, district maintenance personnel count the number of trucks parked at welcome centers, rest areas, on nearby ramps within 15 miles of the welcome centers/rest areas and at abandoned weigh stations that have been converted to truck parking facilities. The count is done between 4 and 6 a.m., which is typically the busiest time. Data is collected from every rest area and truck parking facility to create a statewide report and updated quarterly.

### Improvement Status:

The fourth quarter of calendar year 2009 showed a small 4 percent increase in the average number of trucks using the rest areas and other truck parking facilities from the previous quarter. Both sides of the Steele I-55 rest area will remain closed until they are converted to truck parking facilities next fall. The Marston southbound I-55 rest area remains closed for construction of a new welcome center. The Doolittle rest areas on I-44 reopened as truck parking facilities in December. These closures have resulted in a temporary decrease of 35 truck parking spaces. Constructing welcome centers with additional truck parking spaces and converting abandoned weigh stations into truck parking facilities continues to be a way to add parking spaces across the state to accommodate the need for additional truck parking.



A photograph of construction workers on a bridge deck. In the foreground, a worker wearing a hard hat decorated with various stickers, including the Mexican flag and a 'LEAK STOP' sticker, is bent over, working with green-coated steel rebar. Several other workers in hard hats and safety gear are visible in the background, also working on the rebar. The rebar is laid out in parallel rows across the concrete deck. The background shows a body of water and a clear sky.

## BEST VALUE FOR EVERY DOLLAR SPENT

*Tangible Result Driver – Roberta Broeker, Chief Financial Officer*

Providing the best value for every dollar spent means MoDOT is running its business as efficiently and effectively as possible. A tightly managed budget means more roads and bridges can be fixed. That keeps Missouri moving. This is one of MoDOT's values because every employee is a taxpayer too!







### Ratio of lane miles per full-time equivalency-15a

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Steve Meystrik, Special Projects Coordinator

#### Purpose of the Measure:

The purpose of this measure is to track how Missouri ranks nationally on the ratio of lane miles per full-time equivalency (FTE). This measure assists management in making efficiency and staffing level comparisons to other transportation departments based upon the total number of lane miles within each state system.

#### Measurement and Data Collection:

MoDOT receives the data for this measure from reports by the U.S. Census Bureau and Federal Highway Administration (FHWA).

The number of state DOT employees is obtained annually from U.S. Census Bureau reports of state government employment within several broad classifications that include "highways." As defined by the U.S. Census Bureau, the "highways" classification includes employees of state government agencies whose primary function is the maintenance

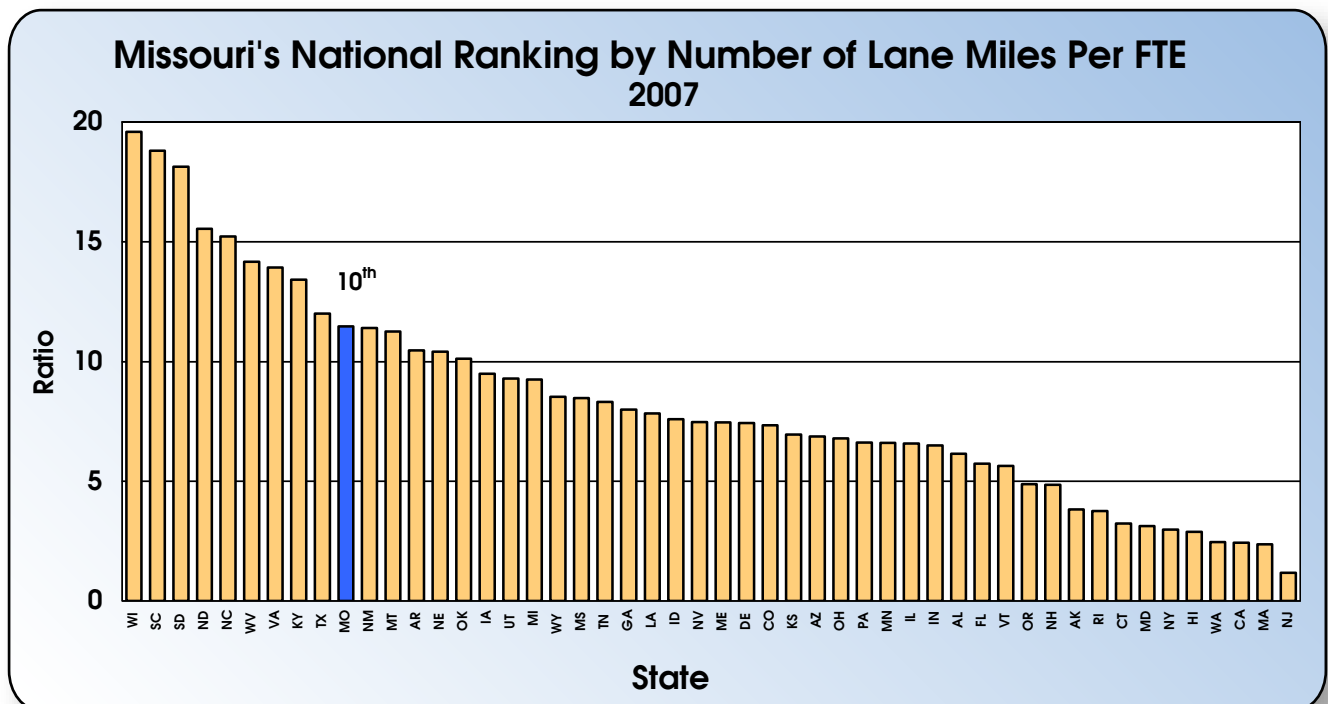
and operation of streets, roads, sidewalks, bridges, tunnels, toll roads, and ferries; snow and ice removal; street lighting; and highway and traffic engineering activities. The number of lane miles for each state is obtained from FHWA's annual Highway Statistics report.

The ratio of lane miles is the number of lane miles each state DOT is responsible for divided by the number of FTEs within the "highways" functional classification.

This is an annual measure updated each July. The most recent reports used to update this measure reflect data collected two years prior.

#### Improvement Status:

According to 2007 data, Missouri ranks tenth in the nation with a ratio of 11.46 lane miles per FTE.



## Number of full-time equivalencies -15b

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Steve Meystrik, Special Projects Coordinator

### Purpose of the Measure:

This measure tracks the change in the number of full-time equivalencies (FTEs) within the department and compares it to the number of FTEs in the legislative budget. The data provides a high-level view of overall staffing at MoDOT in relation to budgeted FTEs.

### Measurement and Data Collection:

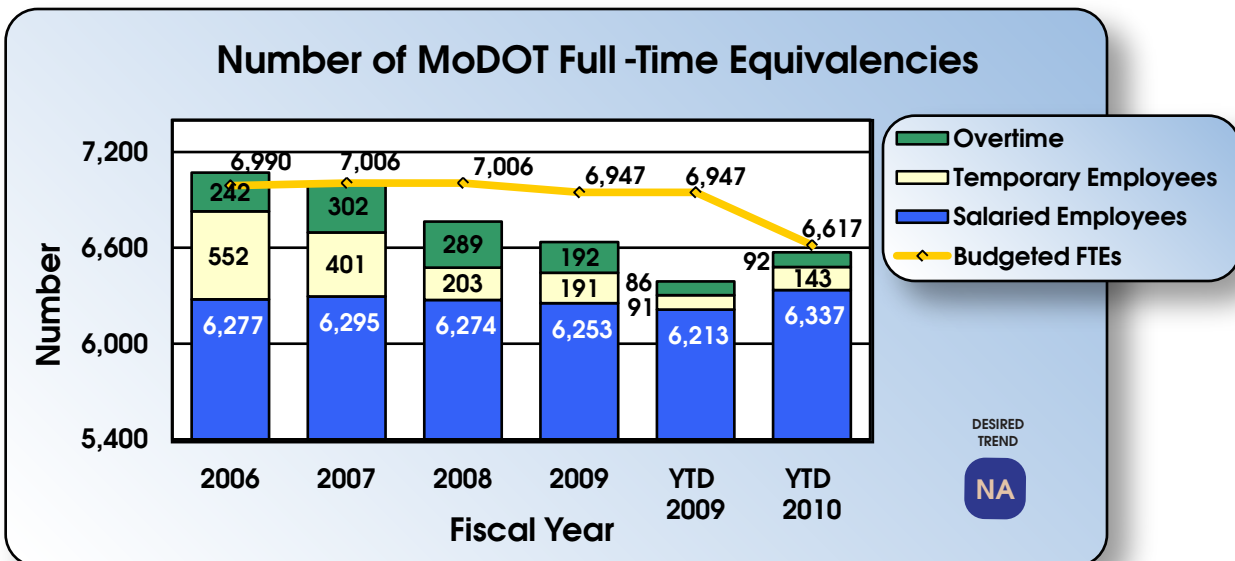
This measure converts the regular hours worked or on paid leave of temporary and salaried employees, as well as overtime worked (minus any hours that are flexed during the workweek), to FTEs. In order to convert these numbers to FTEs, the total number of hours worked is divided by 2,080. Salaried employee data is converted to an annual number for ease in comparison to previous years, whereas temporary employee and overtime data represent actual year-to-date calculations. The data is collected and reported each quarter of the fiscal year.

### Improvement Status:

Through the second quarter of fiscal year 2010, there has been an increase in the number of salaried FTEs, temporary FTEs, and FTEs resulting from overtime hours worked compared to the same time last year. Although year-to-date totals have increased in salaried and temporary employee categories

compared to last year, the department has reduced the number of its salaried and temporary employees as part of cost saving strategies implemented in the second quarter of fiscal year 2010. Since the beginning of fiscal year 2010, MoDOT has reduced its salaried staffing level by 46 positions and the department has 51 fewer temporary employees when compared to the same time last year, which accounts for seasonal fluctuations. The department has continued to manage overtime expenditures; however, the number of overtime hours worked through the second quarter of fiscal year 2010 was significantly impacted by the amount of overtime necessary over the Christmas holiday to clear roads following snowfall throughout the state. Salaried employees worked over 40,000 hours of overtime on December 25 and 26, 2009, the equivalent of approximately 20 FTEs. The snow events in December 2009 also required greater use of temporary employees to assist in snow fight efforts.

Projecting FTEs from salaried employment to an annual number and adding FTEs from actual hours associated with temporary employment and overtime, results in a total of 6,572 FTEs expended in the first two quarters of fiscal year 2010.



## Percent of work capacity based on average hours worked-15c

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Micki Knudsen, Human Resources Director

### Purpose of the Measure:

The purpose of this measure is to track how many hours the average employee works on an annual basis. This measure can assist management in assessing staffing and productivity levels.

### Measurement and Data Collection:

MoDOT tracks the average regular hours worked and average overtime hours worked by employees. The average regular and overtime hours worked does not include seasonal or wage employees. Additional hours worked by employees not eligible to earn overtime or compensatory time are not included. The work capacity measure is the percentage of regular and overtime hours worked out of the 2,080 hours available during a fiscal year.

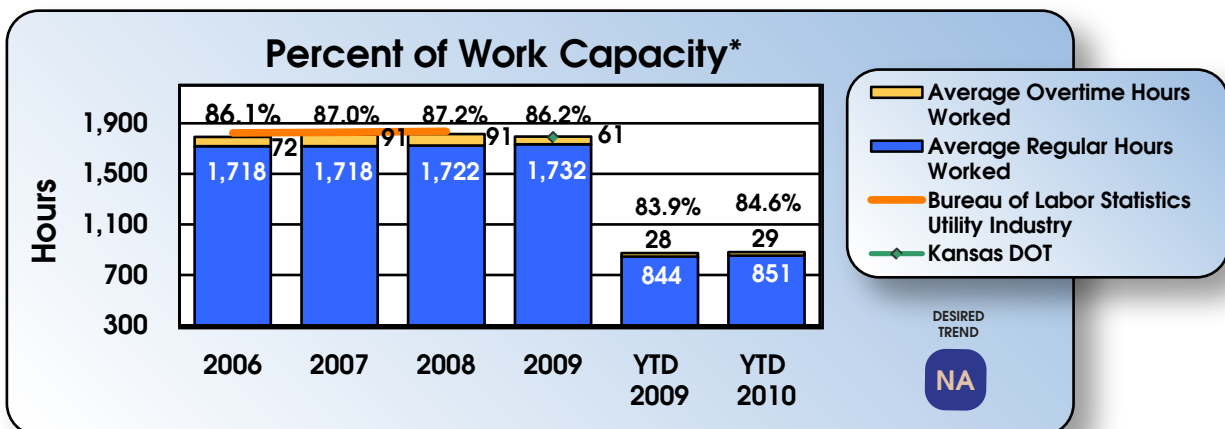
Within a 2,080-hour fiscal year, an employee would work 1,984 hours (work capacity ratio of 95.4 percent) if he/she worked all available hours except the 12 state holidays provided to State of Missouri employees. If another holiday has been granted by Executive Order of the governor, which is customary following the Thanksgiving holiday, then 1,976 hours would be worked at a ratio of 95.0 percent. The difference between MoDOT's reported percent of work capacity and a work capacity of 95.0 percent will illustrate how many hours on average an employee is away from work due to paid or unpaid leave.

The United States Bureau of Labor Statistics publishes hours-worked to hours-paid ratios for 14 industry sectors. The individual ratio of the utility industry

(88.2 percent in 2008) is displayed for comparison purposes due to the similarities in workforce and need for 24/7 operations. The Kansas Department of Transportation has reported a work capacity of 86.0 percent for fiscal year 2009.

### Improvement Status:

MoDOT work capacity was higher through the first two quarters of fiscal year 2010 compared to the same time last year. This increase can be attributed to several factors. Through the first two quarters of fiscal year 2010, average leave usage among salaried employees has decreased slightly and the average number of overtime hours worked has increased compared to the same period last year, both representing employees spending more time at work. Additionally, in 2008, by Executive Order of the governor, a holiday was provided to state employees for the day after Christmas since it fell on a Friday. Due to good weather, approximately only 800 hours of overtime were recorded by MoDOT employees over the two December holidays in 2008 (Christmas and the day after Christmas). In 2009, however, it was unnecessary for an additional holiday to be granted and significant snowfall throughout the state resulted in over 40,000 hours of overtime required on December 25 and 26 (which fell on a Saturday). The overtime worked on these two days alone account for almost 25 percent of all the overtime worked by salaried employees during the first two quarters of the fiscal year.



\* Based on 2,080 hours of work in the fiscal year, including regular and overtime hours for salaried and permanent part-time employees.

## Rate of employee turnover-15d

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Kim Hickey, Employment Manager

### Purpose of the Measure:

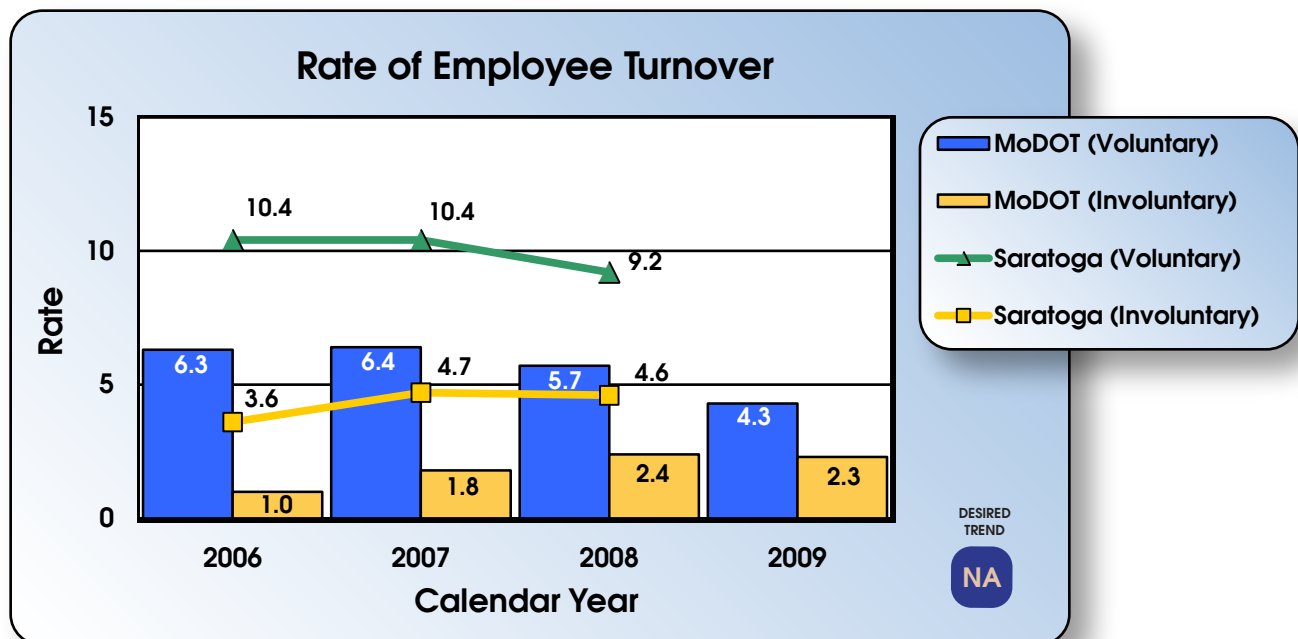
This measure tracks the percentage of employees who leave MoDOT annually and compares the department's turnover rate to benchmarked data. Voluntary turnover includes most resignations and retirements. Involuntary turnover reflects dismissals. Beginning with calendar year 2007, it also includes retirements and voluntary resignations of employees who had a disciplinary history and/or a final performance management rating of "Needs Improvement" or below. Turnover rates as shown in this measure include voluntary and involuntary separations.

### Measurement and Data Collection:

The data is collected statewide to assess overall employee turnover. Comparison data is collected from various sources annually. For benchmarked data, Saratoga Institute surveyed more than 300 organizations representing a wide variety of industries.

### Improvement Status:

The department's voluntary separation rate was down from 5.7 percent in calendar year 2008 to 4.3 percent in calendar year 2009. The department's involuntary separation rate was also down just slightly from 2.4 percent in calendar year 2008 to 2.3 percent in calendar year 2009. There were 99 releases in 2009, and an additional 46 resignations and retirements designated as involuntary separations. Of the remaining 275 voluntary separations that occurred in calendar year 2009, 184 were retirements and 91 were resignations. During calendar year 2009, there were fewer resignations from the department than there had been in more than ten years. The number of resignations by employees with less than one year of service decreased from 50 in 2008 to 33 in 2009. Also, the number of resignations by employees in civil engineering positions decreased from 37 in 2008 to 12 in 2009. The overall decrease in voluntary separations can be attributed to continued unstable market conditions and high unemployment rates statewide.





### Level of job satisfaction-15e

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Paul Imhoff, Employee Development Manager

#### Purpose of the Measure:

This measure tracks the level of employee satisfaction throughout the department at specific points in time. The first chart indicates the level of department employees' job satisfaction and changes in their satisfaction over time. The second chart shows the percentage of MoDOT employees who are satisfied compared to the organizations that scored the best in employee satisfaction using the same survey instrument, and to top-level organizations using a similar survey questionnaire.

#### Measurement and Data Collection:

Employee satisfaction is measured using 18 items from an annual employee survey. The vendor contracted to conduct the employee satisfaction survey in 2003 and 2005 provided "Vendor Best Practice" data collected from an anonymous company. Society for Human Resources Management (SHRM) best practice data was gathered from an SHRM report of an annual job satisfaction survey of 55 Fortune 500 companies. This is an annual measure updated in July each year, with the final survey report completed in October each year.

#### Improvement Status:

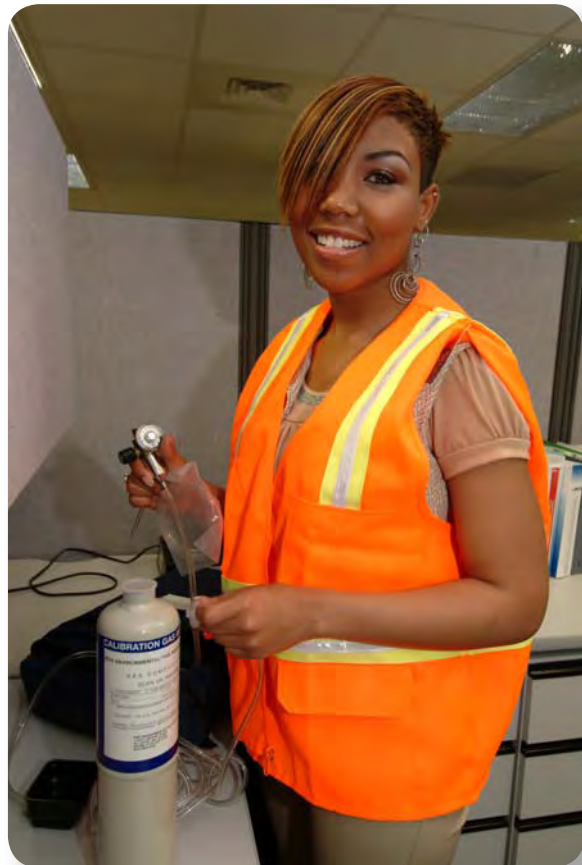
The 2009 Employee Satisfaction Survey was distributed on May 4, 2009, with a completion deadline of June 16, 2009. The final report for the survey was distributed on October 30, 2009.

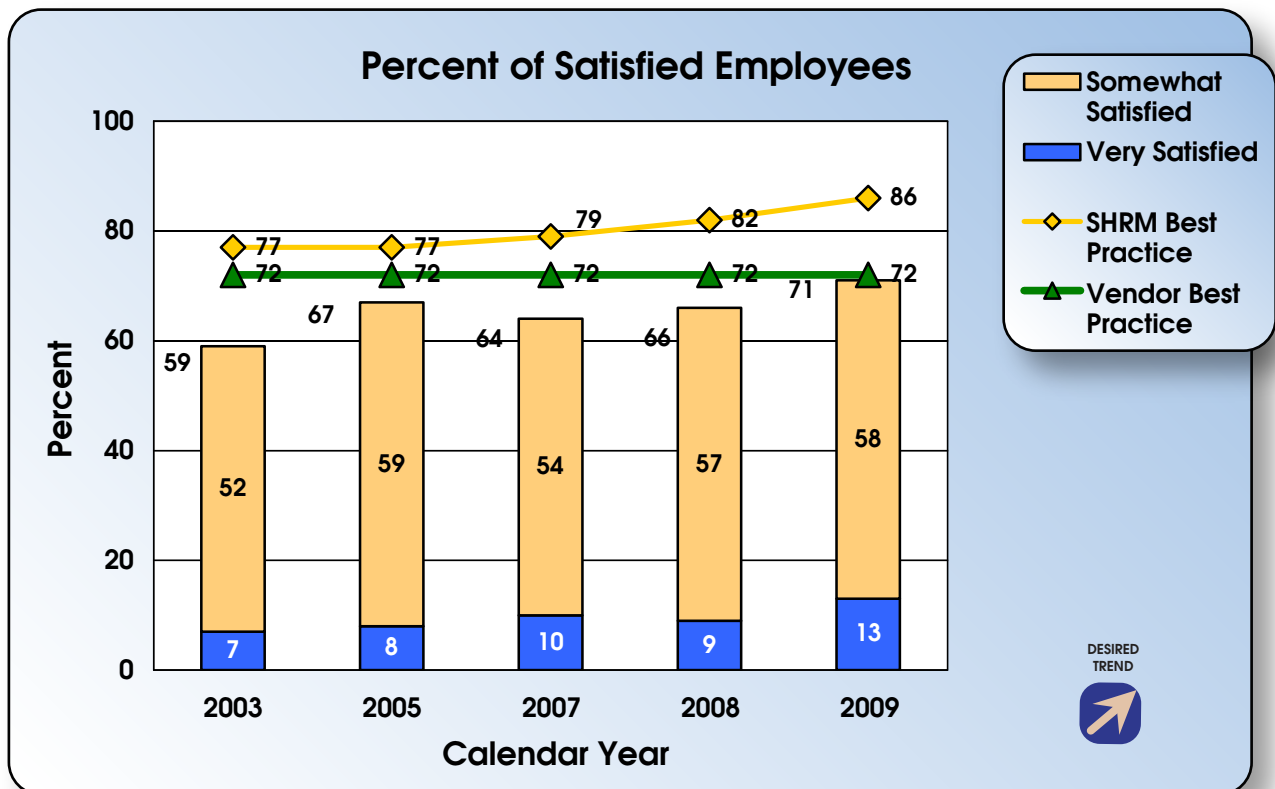
The results from the 2009 survey indicate that 3,792 employees responded to the survey for a 60 percent return rate. This is a decrease from 64 percent in 2008 (417 fewer surveys returned). The percentage of employees that were "very satisfied" increased from 9 percent in 2008 to 13 percent in 2009. Overall, the percentage of employees who indicated they were at least "somewhat satisfied" increased to 71 percent in 2009.

The average rating on all four scales of the Employee Satisfaction Survey increased from 2008 to 2009. Job Satisfaction increased from 3.44 to 3.58 on a 5-point scale. Employee Engagement increased from

3.55 to 3.7. Organizational Justice and Fairness increased from 3.11 to 3.28. Living MoDOT Values increased from 3.45 to 3.6. Similarly, in all ten districts and in Central Office, the average rating on each of the four scales increased.

The greatest number of specific comments from the 2009 survey tended to coincide with the lowest rated items. The area with the most negative comments revolved around pay and salary increase issues. Approximately five percent of respondents (175 employees) made specific negative comments about pay or issues involving the lack of promotion opportunities.





### Number of lost workdays per year -15f

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Jeff Padgett, Risk and Benefits Management Director

#### Purpose of the Measure:

This measure tracks the actual number of days that employees cannot work due to work-related injuries sustained during the reporting period. Note that the results do not include lost workdays for injuries that occurred during previous reporting periods. (Example: an employee that is injured on Dec. 31, 2008 and is off during January of 2009 will not show up as lost time in 2009 because the incident occurred during the previous reporting period.)

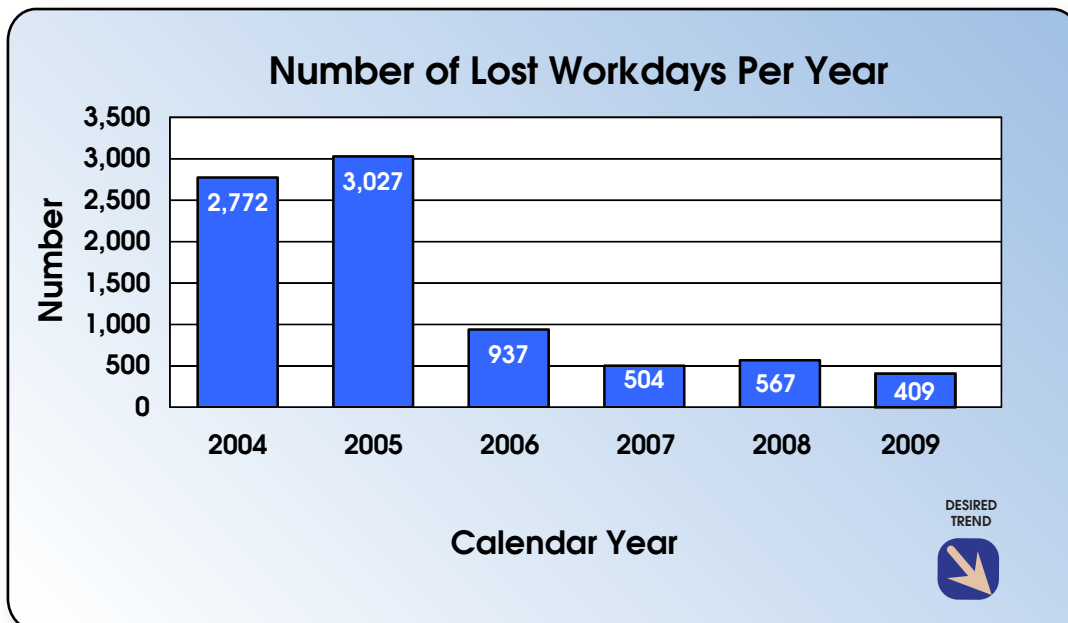
#### Measurement and Data Collection:

The data is collected from Riskmaster, a claims administration software, and reported quarterly.

#### Improvement Status:

The number of lost workdays for 2009 is 28 percent less than 2008, decreasing from 567 in 2008 to 409 lost workdays in 2009. Though not illustrated in the chart, the number of lost-time incidents reflected a 38 percent reduction from 2008 to 2009. Subrogation

claims attribute the greatest number of lost workdays. Kansas City Area District suffered two motor vehicle third party incidents. Both employees sustained serious injuries that resulted in a significant number of lost workdays. The St. Louis Area District suffered a major motor vehicle third party incident. This employee sustained serious injuries and remains hospitalized at this time. The Southwest District also contributed a large number of lost workdays due to two incidents. Both employees were involved in cutting trees, and sustained relatively serious injuries. MoDOT continues to develop and implement new safety-related initiatives to further reduce lost workdays, including Safety Pays, a work simulation physical exam and the Fit for Duty program. Risk management personnel now direct all medical care for work-related injuries. MoDOT continues to identify and provide light-duty assignments for injured workers with restrictions in an effort to get them back to work quickly.



## Rate and total of OSHA recordable incidents -15g

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Jeff Padgett, Risk and Benefits Management Director

### Purpose of the Measure:

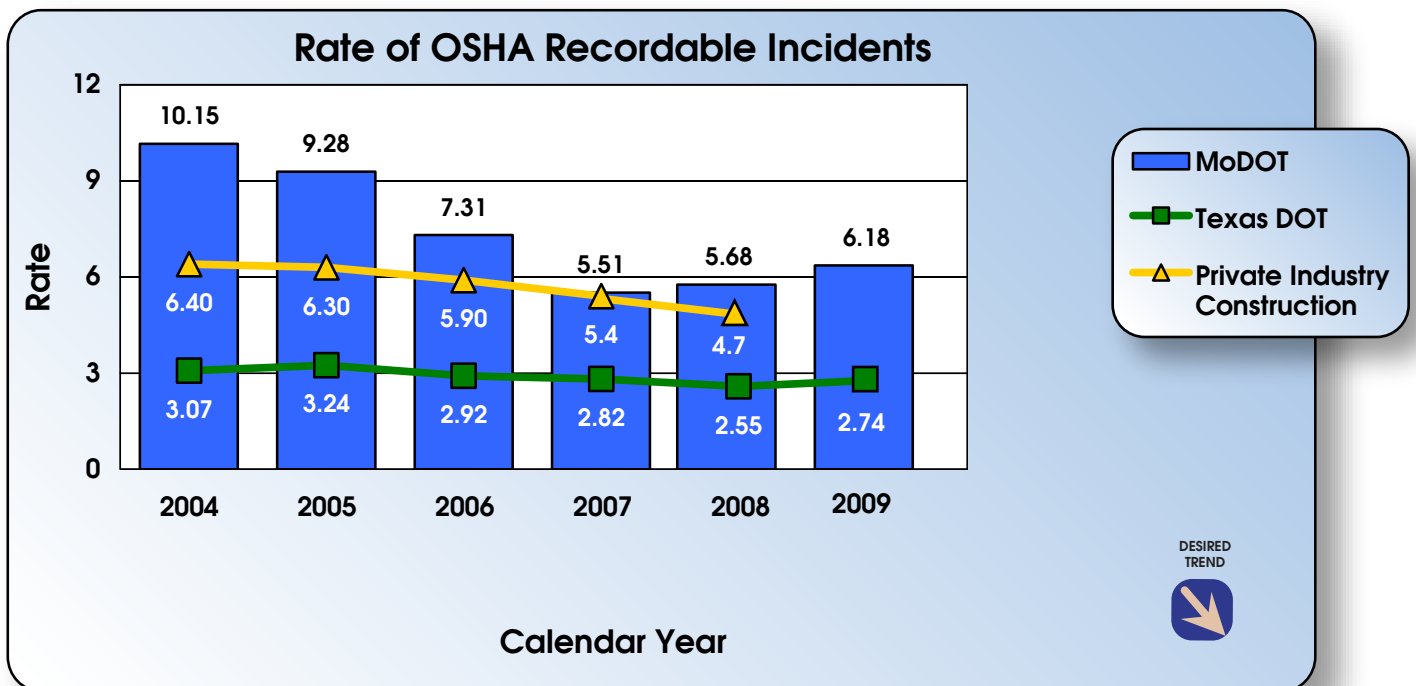
This measure tracks the number of recordable injuries, as defined by OSHA, in total and as a rate of injuries per 100 workers. The calculation for incidence rate is the number of recordables times 200,000 divided by the number of hours worked. The 200,000 used in the calculation is the base for 100 full-time workers (working 40 hours per week, 50 weeks per year). OSHA defines a recordable incident as a work-related injury or illness that results in death, days away from work, restricted work or transfer to another job, medical treatment beyond first aid or loss of consciousness. This measure has been changed to reflect this definition for all years being reported in this measure.

### Measurement and Data Collection:

MoDOT reports on the measure quarterly, and collects the injury data from Riskmaster, a claims administration software. The number of hours worked is taken from MoDOT's payroll data.

### Improvement Status:

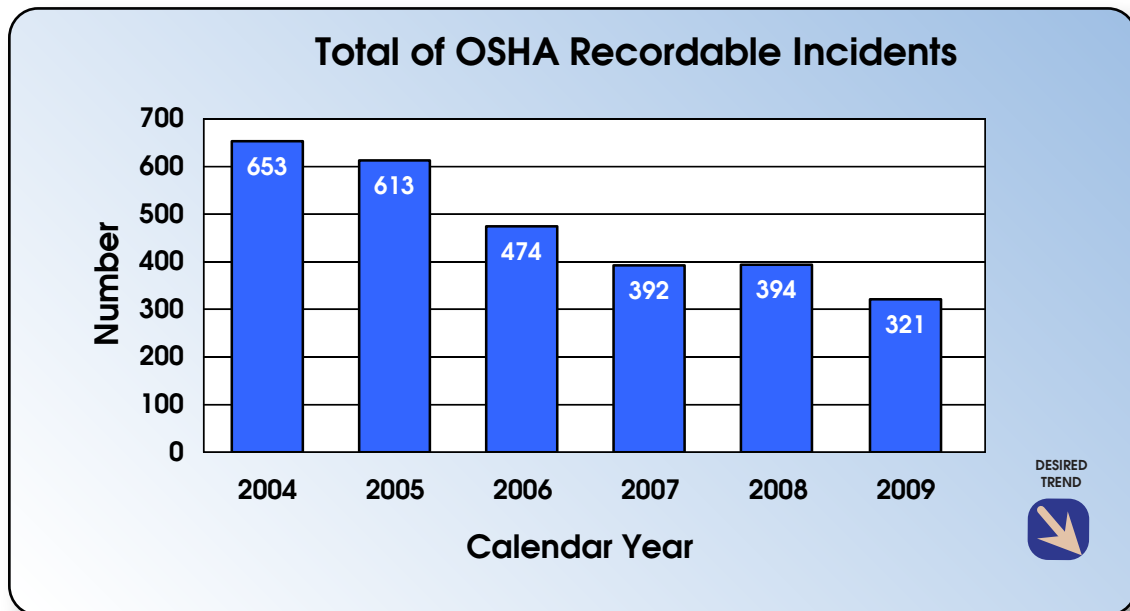
Both the number of OSHA recordables and the incidence rate for MoDOT have increased over the reporting periods noted. The incident rate increased by 9 percent over 2008, rising from 5.68 to 6.18. The number of OSHA recordables increased by 7 percent over the same period, with an increase from 394 to 420.



(Information from Private Industry Construction was not yet available for 2009.)



## BEST VALUE FOR EVERY DOLLAR SPENT



## Number of claims for general liability-15h

**Result Driver:** Roberta Broecker, Chief Financial Officer

**Measurement Driver:** Jeff Padgett, Risk and Benefits Management Director

### Purpose of the Measure:

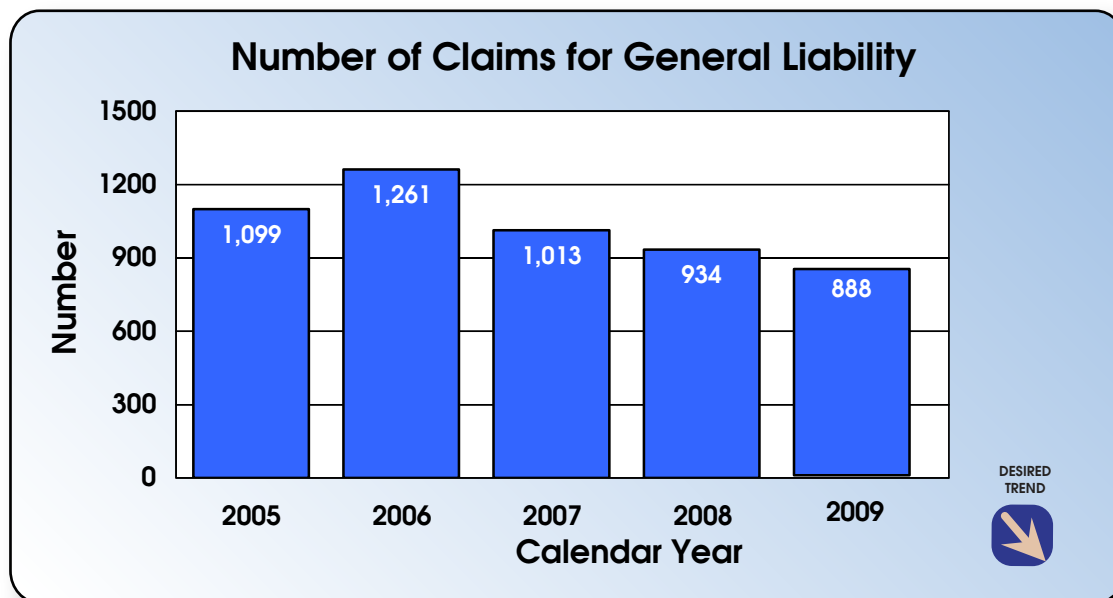
General liability claims arise from allegations of injuries/damages caused by the dangerous condition of MoDOT property and the injury/damage directly resulted from the dangerous condition. In addition, an employee must be negligent and create the dangerous condition or MoDOT must have actual or constructive notice of the dangerous condition in sufficient time prior to the injury/damage to have taken measures to protect the public against the dangerous condition. This measure tracks the number of general liability claims filed.

### Measurement and Data Collection:

Risk and Benefits Management reports on the measure quarterly and collects the claims data from Riskmaster, a claims administration software.

### Improvement Status:

Our desired effect is a reduction in claims. This year we have a modest decrease, due primarily to an overall reduction in pothole claims.



### Cost and usage of utilities for facilities -15i

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Doug Record, General Services Manager Facilities

**Purpose of the Measure:**

This measure tracks the cost and usage of utilities for department facilities, excluding roadways. It attempts to capture the impact of energy efficient improvements in buildings and operations.

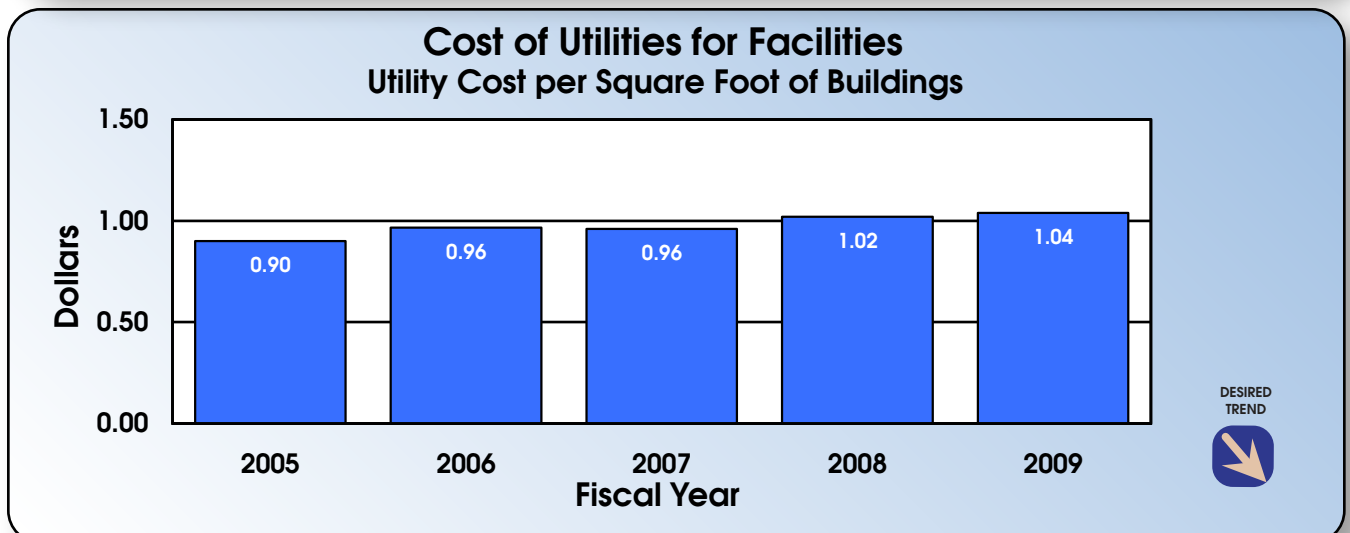
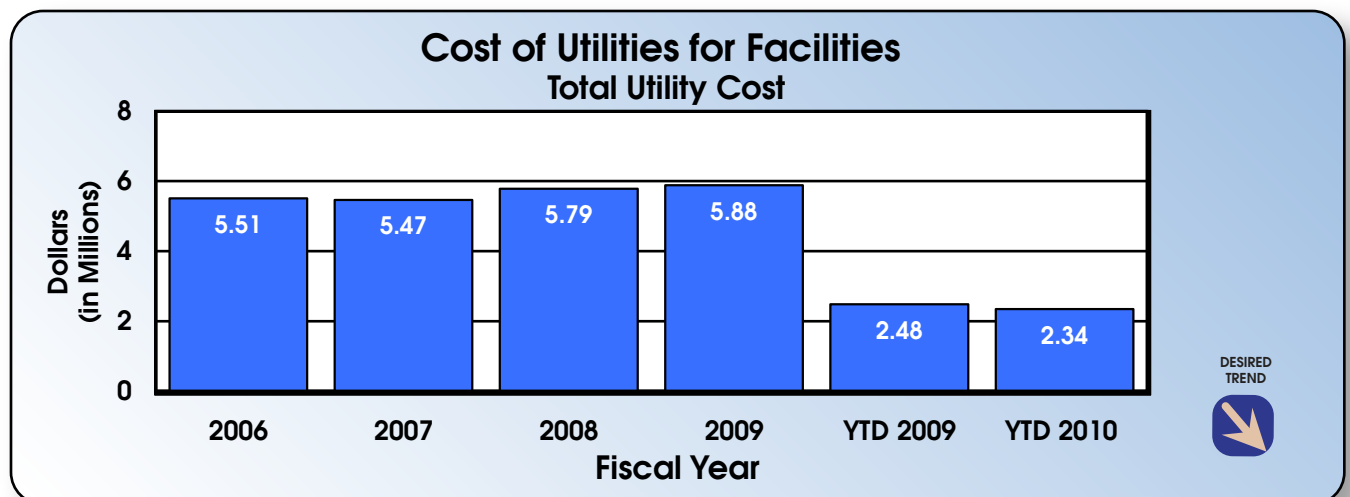
**Measurement and Data Collection:**

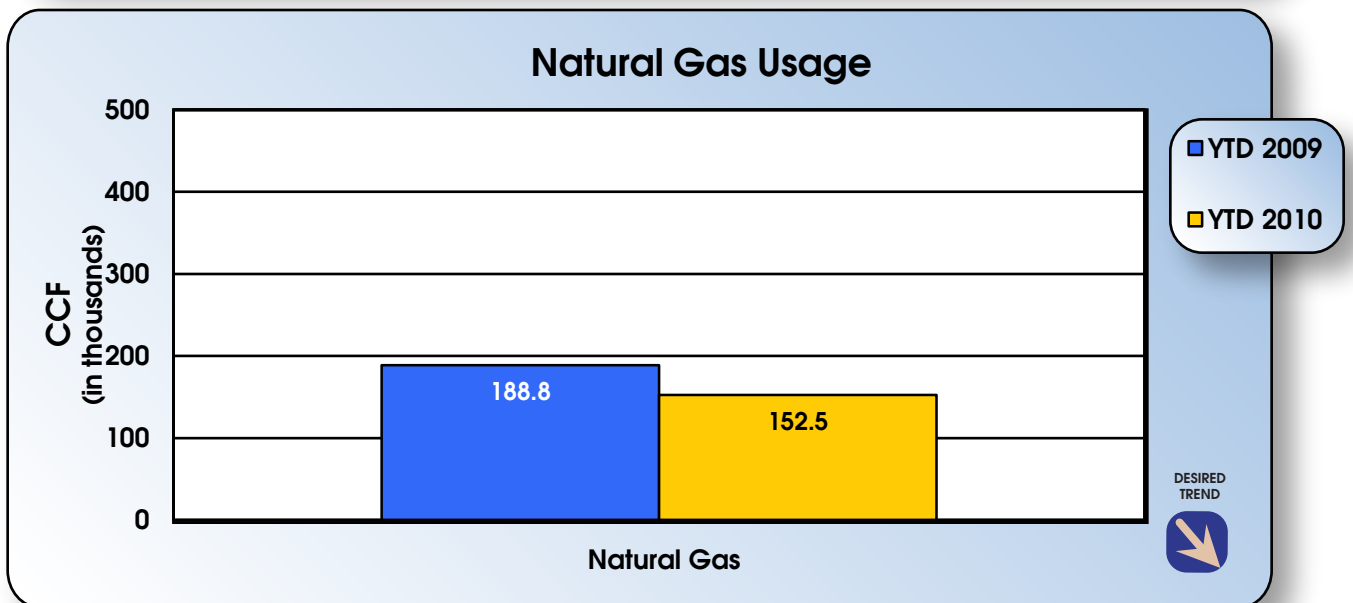
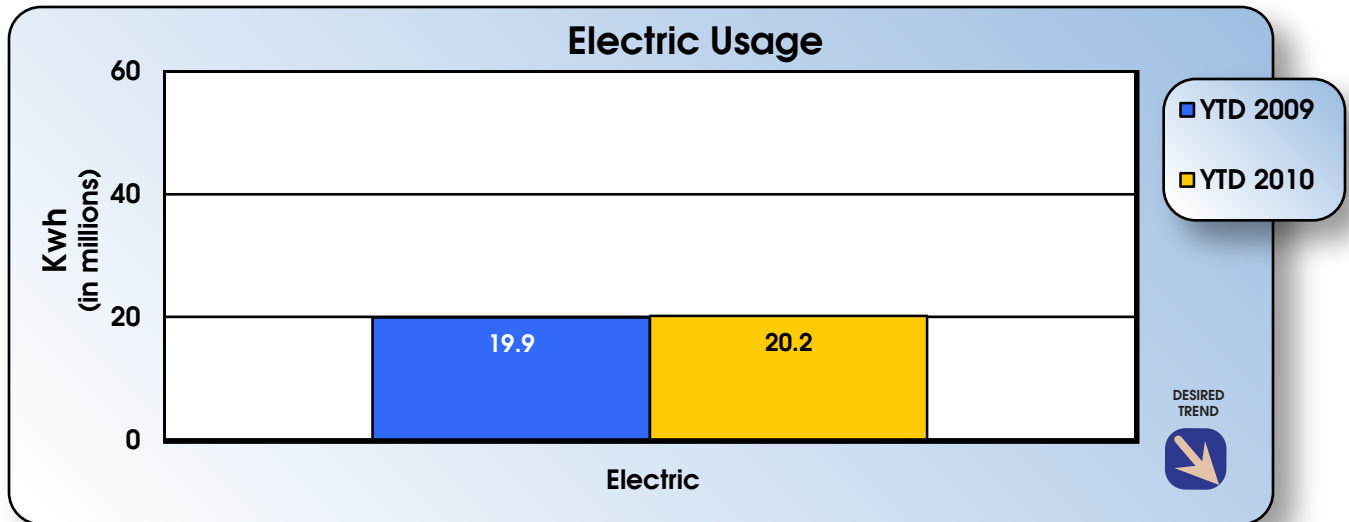
The data is collected based on utility expenditures and usage recorded in the statewide financial accounting system. The following utilities are included in the analysis: electricity (excluding roadways, lighting and signals), steam, water, sewer, natural gas, propane, fuel oil, other fuel and utilities.

This is a quarterly measure with the per square foot chart being updated annually.

**Improvement Status:**

The total cost reported for utilities for year to date fiscal year 2010 is \$2,342,027, a decrease of five and one-half percent over the same time frame in fiscal year 2009. The usage graphs show a one point four percent increase in electric and a 19.25 percent decrease in natural gas. The cost per square foot chart is an annual measure, therefore no updates. We continue to improve the accuracy and timeliness of inputting usage information and have, where possible corrected historical errors.







## BEST VALUE FOR EVERY DOLLAR SPENT

### Fleet status -15j

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Jeannie Wilson, Central Office General Services Manager

#### Purpose of the Measure:

This measure tracks the number of units in the MoDOT fleet as well as their condition. The chart provides an overall fleet condition status based on actual fleet age and meter compared to maximum life-cycle thresholds.

#### Measurement and Data Collection:

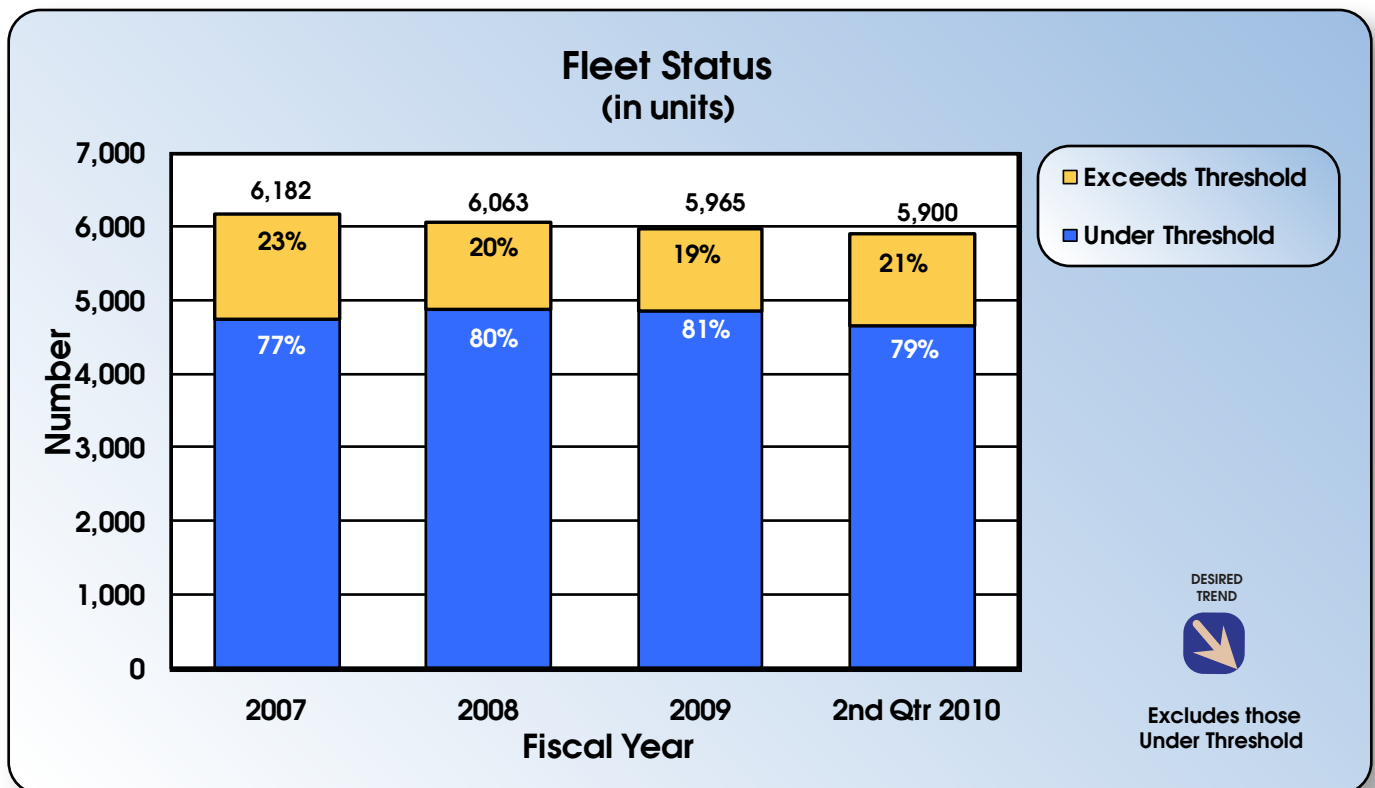
Age and meter thresholds were established based on maximum useful life. Units are identified as either exceeding or not exceeding their primary life cycle for either age or meter.

Reports are generated from the FASTER Fleet Management System to obtain information regarding equipment age and usage.

#### Improvement Status:

The overall fleet size has decreased from 5,965 to 5,900 units through the second quarter of fiscal year 2010.

MoDOT's goal is to increase the percentage of fleet under the replacement threshold. According to the established thresholds, 79 percent of the MoDOT fleet is under the recommended replacement criteria. The criteria suggests that 21 percent of the fleet currently meets or exceeds the threshold. MoDOT has made a concerted effort to maintain the fleet at the appropriate level to ensure service needs are met.



## Percent of vendor invoices paid on time -15k

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Debbie Rickard, Controller

### Purpose of the Measure:

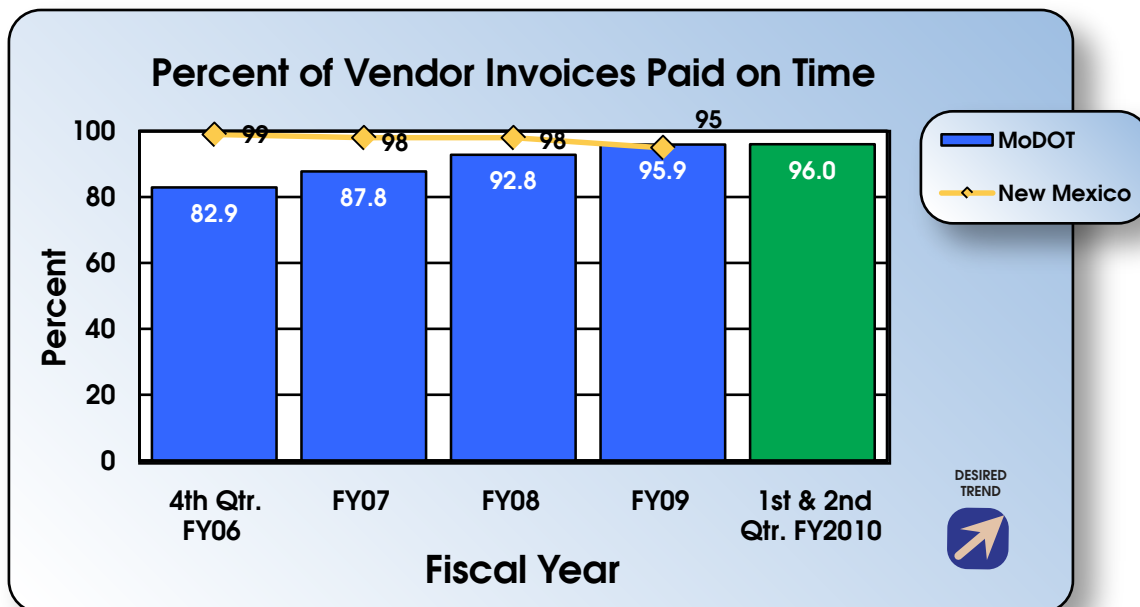
This measure tracks the department's timeliness in processing vendor payments.

### Measurement and Data Collection:

The check date determines if invoice payment is timely. Timely is defined as a check issued less than 31 days from the date of the invoice. The department's measure is benchmarked to the New Mexico DOT through fiscal year 2009. MoDOT uses the vendor invoice date for determining promptness of payment; New Mexico utilizes a combination of vendor invoice date and the date received by the approving division when the invoice has not been promptly delivered. New Mexico no longer publishes this information.

### Improvement Status:

Vendors age their receivables based on the date of invoice. This measure indicates there has been consistent improvement. The steps to further improve are: (1) identify specific vendors experiencing delayed payment and work with those vendors to obtain timely, accurate invoices, (2) determine if delayed payments are common to a particular division within the Central Office or a district, (3) identify processes contributing to the delayed payment, and (4) identify innovative solutions to receive invoices from the customer. Analysis tools have been developed to assist in identifying areas where improvements can be made.



## BEST VALUE FOR EVERY DOLLAR SPENT

### Distribution of expenditures -15I

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Debbie Rickard, Controller

#### Purpose of the Measure:

The purpose of the measure is to demonstrate a responsible use of taxpayers' money, with the emphasis of spending on construction and maintenance of our transportation system.

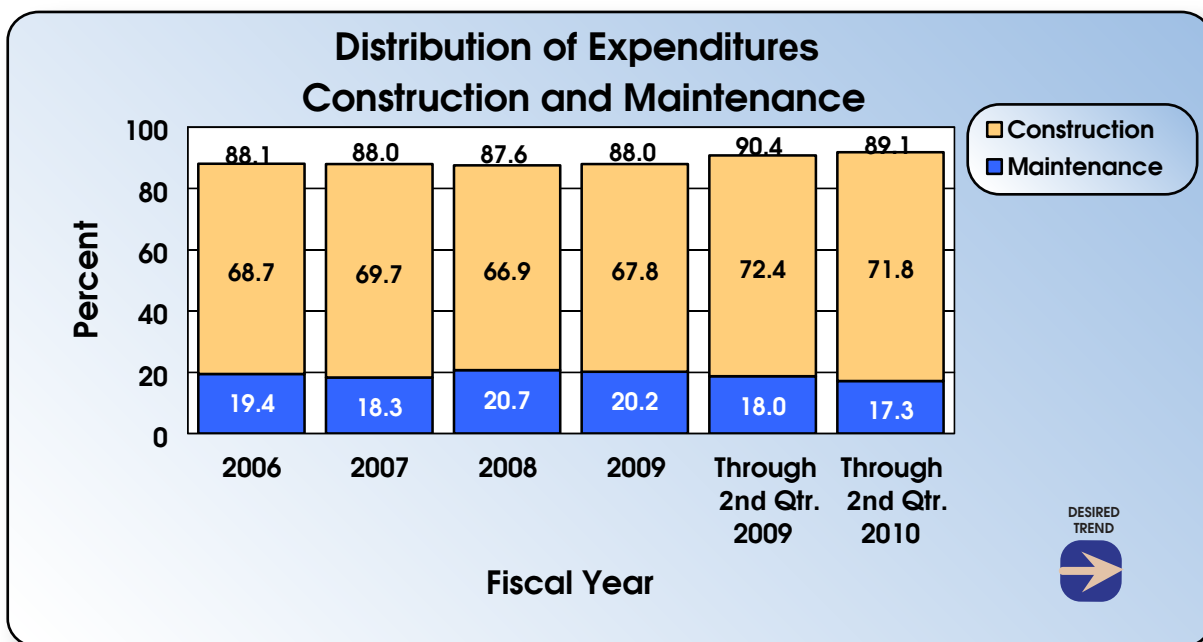
#### Measurement and Data Collection:

The data collection is based on cash expenditures by appropriation on a quarterly basis. Construction and maintenance expenditures are defined as expenditures from the construction and maintenance appropriations. Other expenditures include: administration, multimodal, fleet, facilities, and information systems (FFIS), Motor Carrier and Highway Safety appropriations. Debt service appropriations are not included.

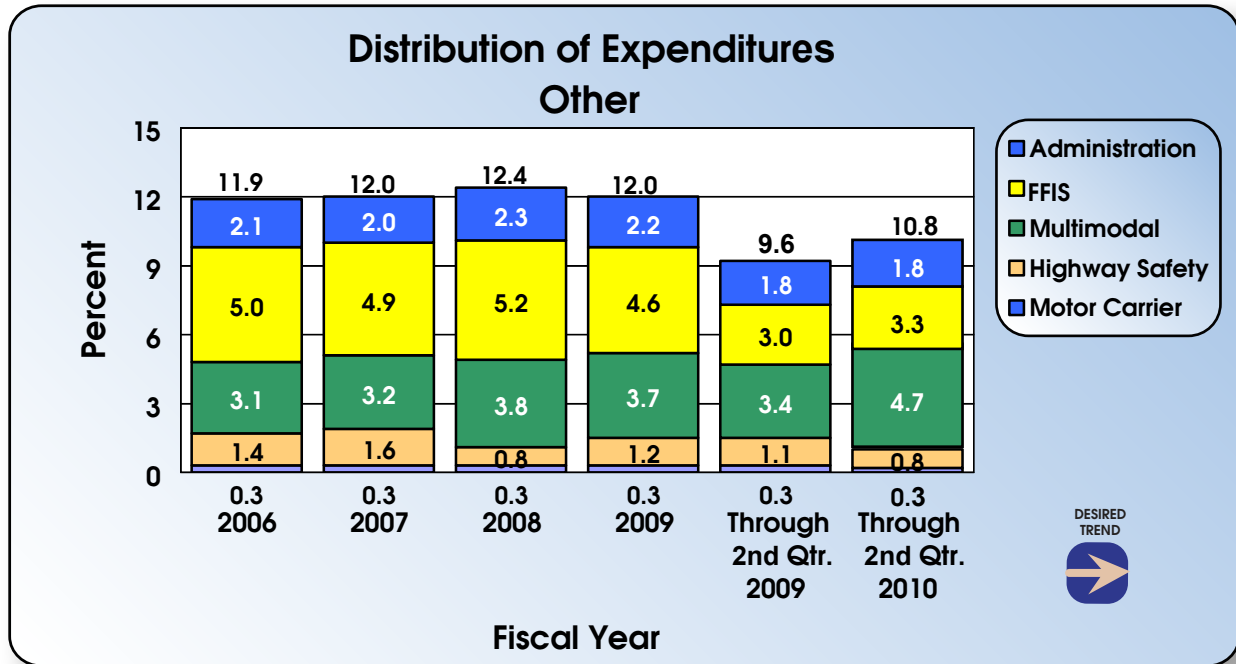
#### Improvement Status:

MoDOT's emphasis is on expenditures for routine maintenance of the system (maintenance appropriation) and rehabilitation and construction of the system (construction appropriation).

Construction expenditure amounts have increased as a result of a larger construction program and the American Recovery and Reinvestment Act (ARRA) funds. Multimodal expenditure amounts increased as a result of ARRA funds. Administration, Motor Carrier, Highway Safety and FFIS have remained relatively constant as a percent of total expenditures.



	Thousands of Dollars					
	2006	2007	2008	2009	YTD 2009	YTD 2010
Construction	1,376,944	1,542,674	1,377,328	1,533,866	929,365	1,013,436
Maintenance	388,572	405,447	424,815	457,020	231,725	244,524
Total Const. & Maint.	1,765,516	1,948,121	1,802,143	1,990,886	1,161,090	1,257,960



	Thousands of Dollars					
	2006	2007	2008	2009	YTD 2009	YTD 2010
Administration	43,076	45,086	46,808	49,214	23,161	24,826
Multimodal	61,431	71,839	77,265	83,007	43,493	66,840
FFIS	99,418	108,023	106,343	104,635	39,015	47,244
Motor Carrier	6,741	6,899	6,930	7,095	3,441	3,577
Highway Safety	27,657	35,730	17,064	26,531	14,111	11,164
<b>Total Other</b>	<b>238,323</b>	<b>267,577</b>	<b>254,410</b>	<b>270,482</b>	<b>123,221</b>	<b>153,651</b>

<b>Total Expenditures</b>	<b>2,003,839</b>	<b>2,215,698</b>	<b>2,056,553</b>	<b>2,261,368</b>	<b>1,284,311</b>	<b>1,411,611</b>
---------------------------	------------------	------------------	------------------	------------------	------------------	------------------





### Accuracy of state revenue projections -15m

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Ben Reeser, Financial Resource Administrator

#### Purpose of the Measure:

The measure shows the precision of state revenue projections. Projections are used to prepare the budget that funds MoDOT's operations and capital program.

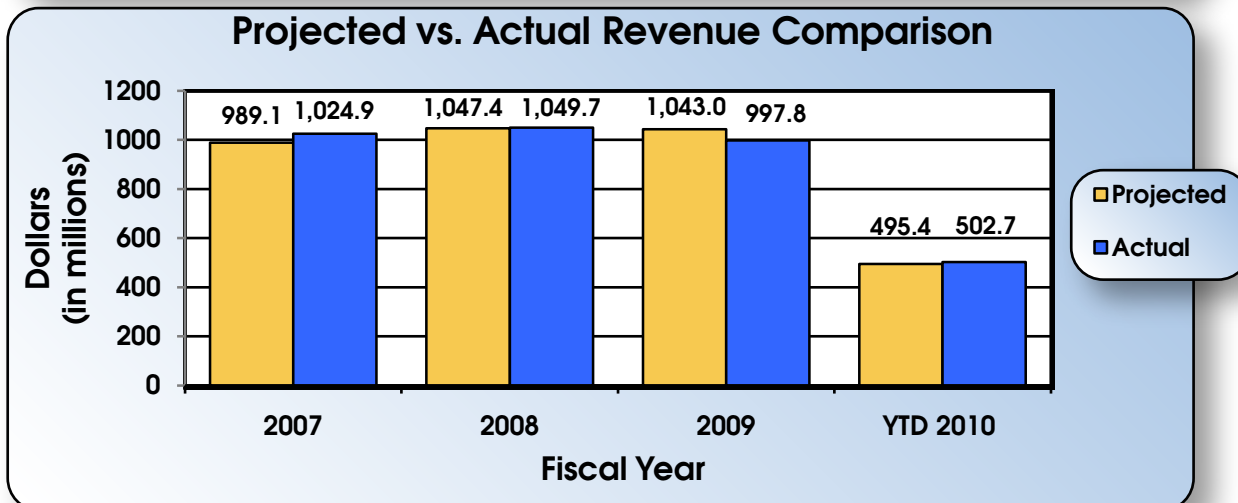
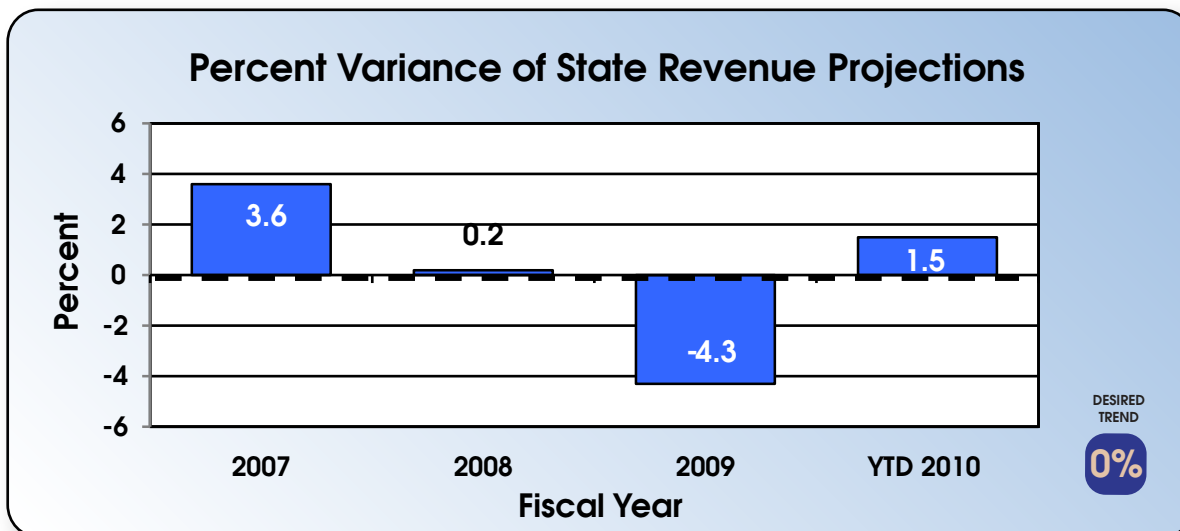
#### Measurement and Data Collection:

State revenue includes three major components of taxes and fees paid by highway users: motor fuel taxes, motor vehicle and driver licensing fees, and motor vehicle sales and use taxes. This measure does not include interest earnings and miscellaneous revenue, which are also considered state revenues. The measure provides the cumulative, year-to-date percent variance of actual state revenue versus

projected state revenue. Fiscal year 2010 projections are based on the financial forecast prepared in the spring of 2009. This measure is updated quarterly.

#### Improvement Status:

The actual state revenue was more than projected through the second quarter of fiscal year 2010. The projected revenue was \$495.4 million. However, the actual receipts were \$502.7 million, a difference of \$7.3 million and a positive variance of 1.5 percent. The desired trend is for the actual revenue to match projections with no variance. MoDOT staff adjusts future operating and capital budgets to account for these variances, if needed.



## MoDOT national ranking in revenue per mile –15n

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Ben Reeser, Financial Resource Administrator

### Purpose of the Measure:

The measure shows Missouri's national ranking in the amount of revenue per mile that is available to spend on the state highway system.

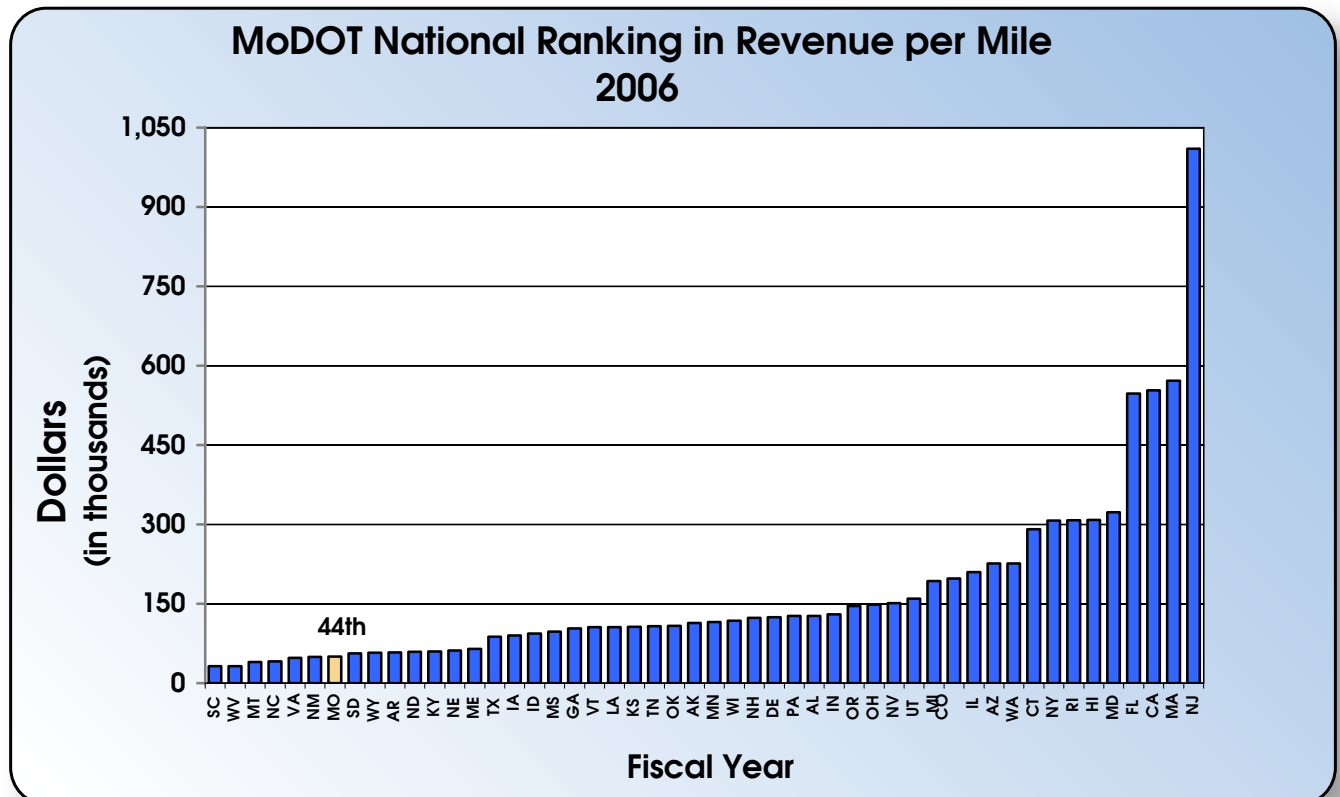
### Measurement and Data Collection:

Revenue is the total receipts less bonds as reported in the Federal Highway Administration's 2006 annual highway statistics report entitled "Revenues Used By States For State-Administered Highways." The mileage is the state highway agency miles as reported in the Federal Highway Administration's 2006 annual highway statistics report entitled "State Highway Agency-Owned Public Roads." Resource Management collects this information from the Federal Highway Administration. This measure is

updated as the data becomes available from the Federal Highway Administration.

### Improvement Status:

Missouri's revenue per mile of \$49,977 currently ranks 44<sup>th</sup> in the nation. Missouri has a very large state highway system, consisting of 33,681 miles, which is the seventh largest system in the nation. New Jersey's revenue per mile of \$1,010,172 ranks first. However, its state highway system contains only 2,326 miles. MoDOT staff continues to communicate the need for additional transportation funding to the public. Missouri's transportation needs greatly exceed current available funding.



### Number of excess properties conveyed and gross revenue generated from excess properties sold -150

**Result Driver:** Roberta Broecker, Chief Financial Officer

**Measurement Driver:** Kelly Lucas, Right of Way Director

#### Purpose of the Measure:

The purpose of this measure is to track the number of excess parcels conveyed from MHTC ownership and to track the amount of revenue generated from the sale of excess property. In order to fulfill its stewardship role of asset management while observing practical business decisions, the department is proactively identifying and disposing of property that is no longer needed for the maintenance of the transportation system, will not be used for future expansion projects and is no longer needed for its operations. Funds received from the sale of excess properties are used to improve the condition of the state highway system. The districts use these funds to apply toward the costs associated with various maintenance activities and construction projects.

#### Measurement and Data Collection:

Data collection for this measure is reported on a quarterly basis from the Realty Asset Inventory system.

#### Improvement Status:

MoDOT conveyed 170 parcels in the first two quarters of fiscal year 2010. One hundred and two excess parcels were conveyed in the second quarter compared to 68 in the previous quarter. First and second quarter revenue from excess sales totals \$1,809,926 which is greater than the \$1,632,029 generated in the first and second quarters of fiscal year 2009. Revenue came from 44 percent of the conveyances.

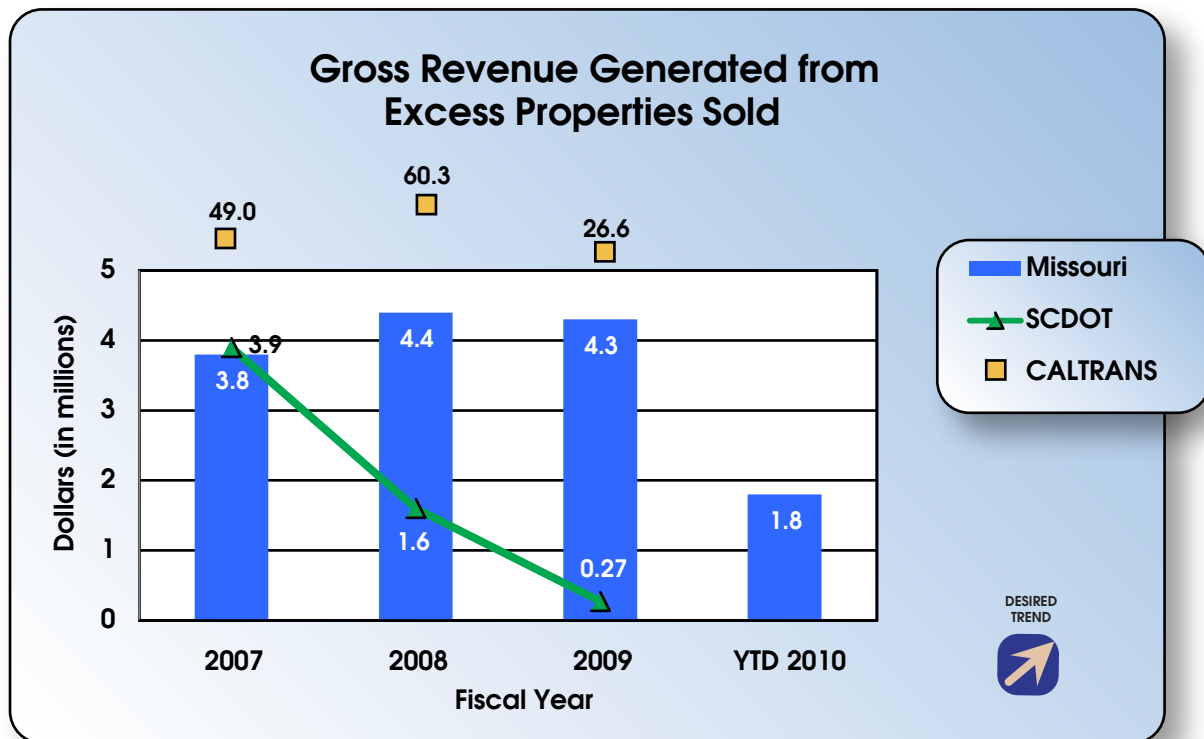
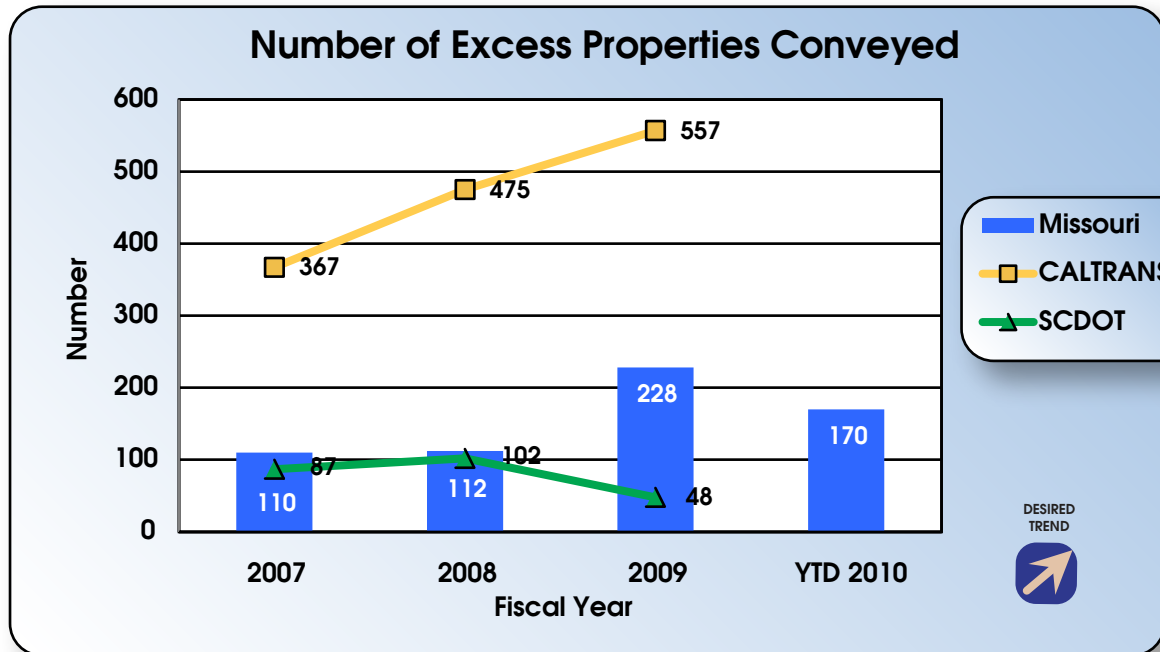
Benchmarks have been established to assess our level of performance against other DOTs. CALTRANS, a leader in excess property conveyance, took an aggressive approach to convey excess property in 2007 and continues to show improvements from year to year. CALTRANS achieved a 29 percent increase in excess property conveyed in fiscal year 2008 and a 17 percent increase in fiscal year 2009. Both CALTRANS and the SCDOT show a decline in revenue generated for the previous two years.

MoDOT accepted sealed bids and auctioned 21 properties in the Realty to Roads BLITZ in November. Bids were received on more than 75 percent of the properties advertised for sale. The 16 properties for which bids were received appraised at \$805,990. High bids totaled \$668,190 or approximately 83 percent of the appraised value.

The MoDOT Internet "Realty for Sale" web page received 9,985 hits in the second quarter compared to 3,601 hits in the first quarter.

A land surveying project has been added to the STIP to give districts the opportunity to use surveying consultants for excess properties when the need arises.











# ATTRACTIVE ROADSIDES

*Tangible Result Driver – Don Hillis, Director of System Management*

An enjoyable transportation experience includes more than a smooth surface – motorists expect to see roadsides free of litter and debris, well-managed and maintained grass and other vegetation and other attractive enhancements. MoDOT works to meet and exceed expectations for roadsides. Beautiful roadsides are visible proof that MoDOT takes pride in everything it does.

### Percent of roadsides that meet customers' expectations-16a

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Mike Shea, Maintenance Liaison Engineer

#### Purpose of the Measure

This measure tracks the percent of MoDOT's roadway system that meets customers' expectations for attractiveness.

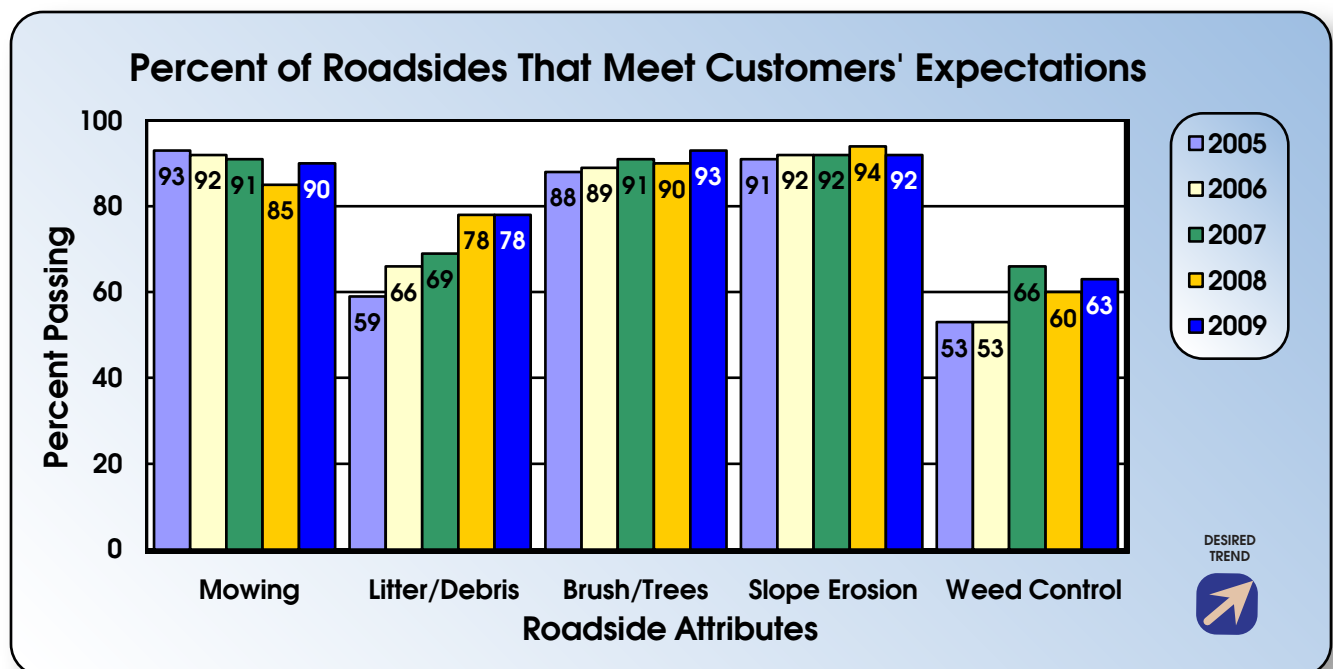
#### Measurement and Data Collection

A list of roadside quality indicators was developed and approved based on an industry-wide literature review. The activities selected for this measure were used to develop a quality assurance checklist for roadside attractiveness. Data collection for this measure is based on a yearly inspection of a number of randomly selected sample sites located throughout the state. The random sites are inspected yearly for each activity.

This is an annual measure updated each January.

#### Improvement Status:

Over the past five reporting years, the five roadside activities referenced below have shown stable to improving trend lines. In an effort to optimize resources in vegetation management the department has implemented an array of Best Practices for mowing and weed control. Those best practices focus on improved mowing plans, right sizing mower fleets and the use of plant growth regulators (PGRs) to reduce costs while still meeting the department's policy for vegetation management. MoDOT staff will continue to implement best practices to improve efficiencies in mowing and all of the other roadside attributes.



## Number of miles in Adopt-A-Highway program -16b

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Stacy Armstrong, Roadside Management Supervisor

### Purpose of the Measure:

This measure tracks public involvement in taking care of Missouri's roadsides through the Adopt-A-Highway program. Missouri has one of the largest and oldest Adopt-A-Highway programs in the nation. The volunteers learn about litter awareness and some of the challenges MoDOT faces, while allowing maintenance crews to do more critical activities.

### Measurement and Data Collection:

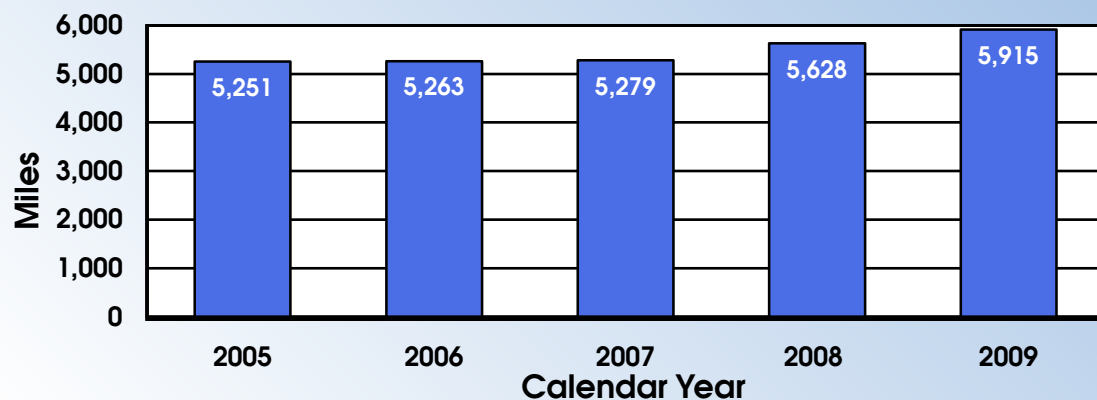
Adopters agree to pick up litter on a designated roadway section for a minimum of four times a year and report their results. Adopters commit to a three-year agreement when they join the program. Urban adoptions are for a minimum of one-half mile and rural adoptions are for at least two miles. Miles are measured by the centerline, however, volunteers are responsible for both sides of the roadway. Adopter-related information is maintained in an Adopt-A-Highway database using the Transportation

Management System. This is an annual measure updated quarterly.

### Improvement Status:

In recent years, the number of miles adopted has increased. Recent growth may be due to increased public awareness through No MORE Trash!, a litter-prevention campaign coordinated by MoDOT and the Department of Conservation. There are 400 new adoptions in 2009. The program will continue to be promoted at Earth Day, state and county fairs, and other events. Sponsor-A-Highway, a complementary program to Adopt-A-Highway, was launched on September 17, 2008. Currently 20 miles are sponsored for litter cleanup in the Kansas City and St. Louis areas. New Adopt-A-Highway safety vests were introduced in January 2009. A Web-based Adopt-A-Highway database was implemented in April 2009.

**Number of Miles in Adopt-A-Highway Program**



DESIRED  
TREND







# ADVOCATE FOR TRANSPORTATION ISSUES

*Tangible Result Driver – Pete Rahn, Director of MoDOT*

Transportation issues can be extremely diverse and complex. An efficient transportation system requires leadership and, most importantly, a champion to ensure the resources support projects that will help the department fulfill its responsibilities to the taxpayers. MoDOT will be an advocate for transportation.





### Percent of minorities and females employed-17a

**Result Driver:** Pete Rahn, Director of MoDOT

**Measurement Driver:** Rudolph Nickens, Director of Equal Opportunity and Diversity

#### **Purpose of the Measure:**

This quarterly measure tracks minority and female employment in MoDOT's workforce and compares it with availability data from the Missouri 2000 Census report. Efficient use of people resources provides opportunities for the department to leverage transportation resources with available human capital. By placing the right people in the right place, the department can better serve its customers and help fulfill its responsibilities to taxpayers.

#### **Measurement and Data Collection:**

MoDOT's Affirmative Action software database and Missouri 2000 Census Report are used to collect data. Private sector, departments of transportation, Missouri state agencies, and Missouri 2000 Census Data were researched to determine a benchmark for this measurement. Due to the significant variations for some of these entities (such as pay incentives,

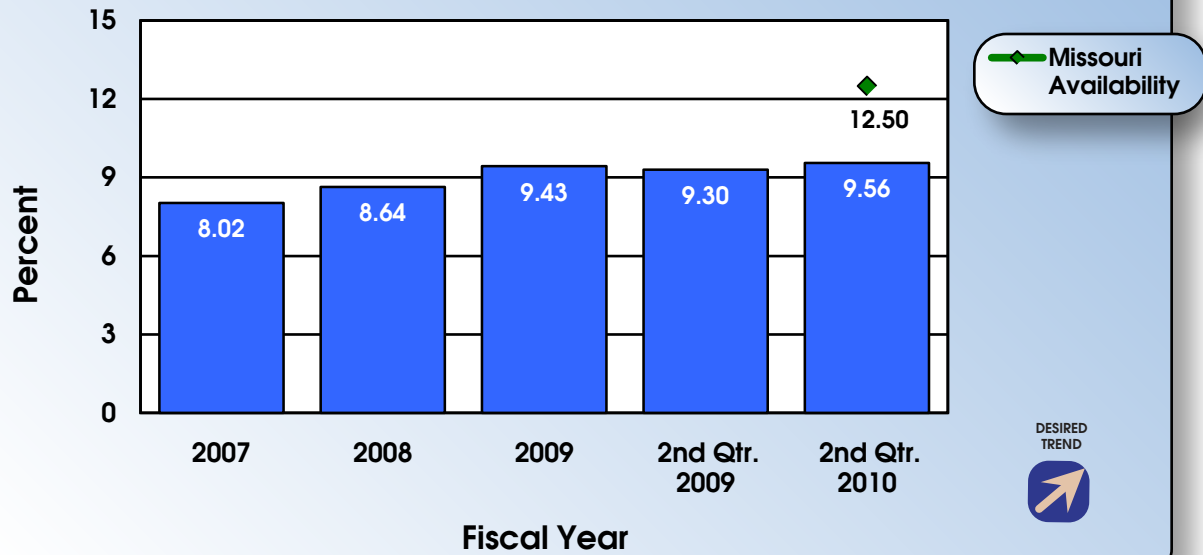
number of employees, geographic locations), it was determined Missouri 2000 Census Data, based on jobs used by the department, would be the benchmark for this measurement.

#### **Improvement Status:**

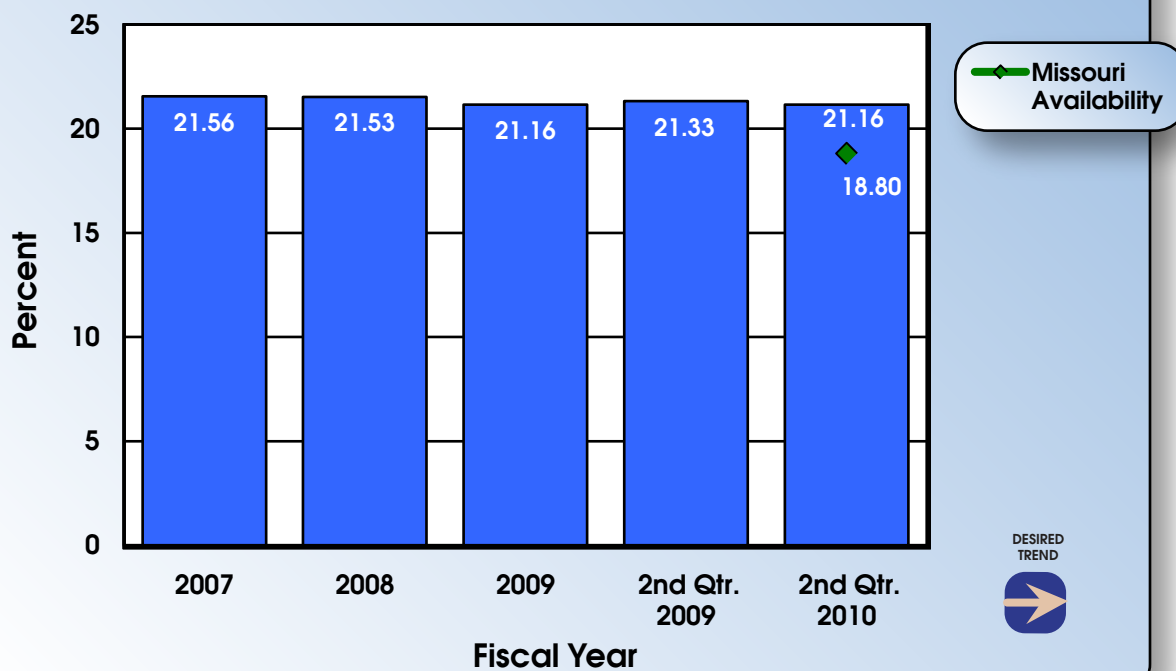
The total number of minority employees increased by 3.21 percent (591 to 610) from the second quarter FY 2009 to second quarter FY 2010. Overall, minority employment increased from 9.30 percent to 9.56 percent during the same period. Both the total number (1,356 to 1,350) and percent (21.33 to 21.16) of female employees decreased. During this quarter the department placed 67 percent of December Co-op Program graduates in full-time positions within Information Systems and Controllers Office.



### Percent of Minorities Employed



### Percent of Females Employed





## Separation rates for females and minorities-17b

**Result Driver:** Pete Rahn, Director of MoDOT

**Measurement Driver:** Rudolph Nickens, Director of Equal Opportunity and Diversity

### Purpose of the Measure:

The purpose of this measure is to track female and minority separation rates compared to the overall MoDOT separation rate.

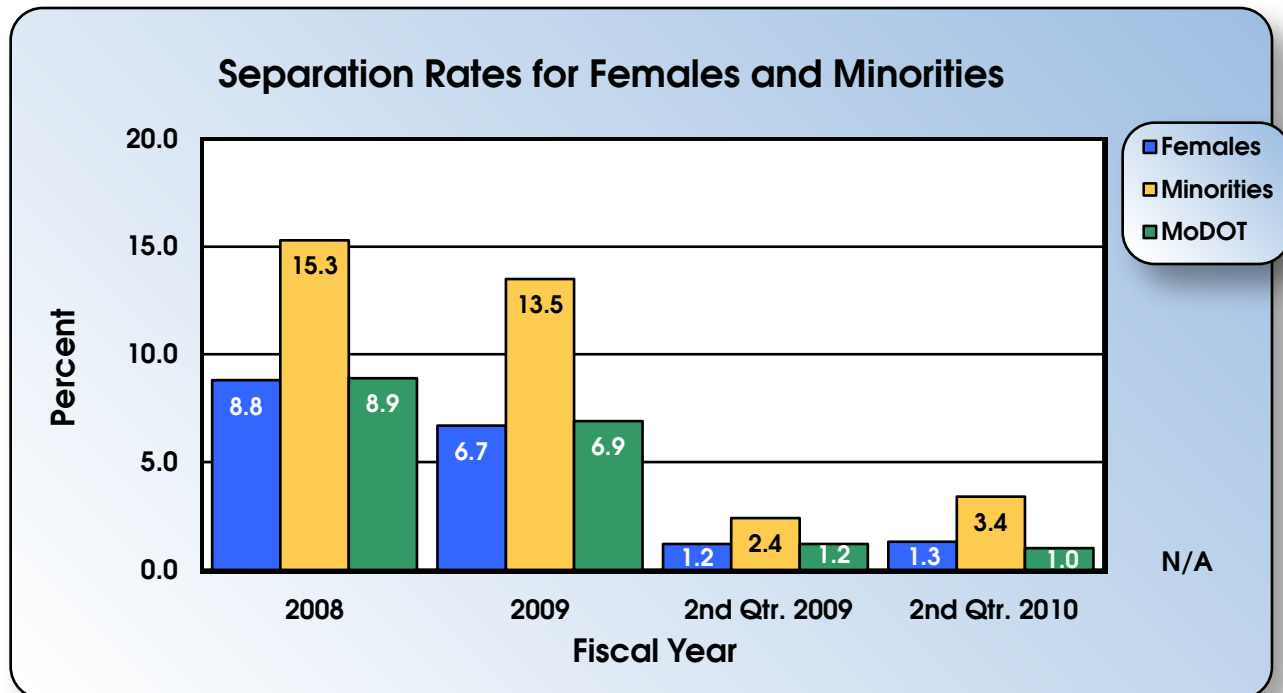
### Measurement and Data Collection:

Data is collected quarterly through SAM II Advantage HR, ReportNet and Peopleclick AAPanner reports. These separations include both voluntary and involuntary separations from the department.

**Improvement Status:** The overall number of separations for MoDOT increased by 9.5 percent (76 to 84) from FY 2009 compared to FY 2010. Of this number, female separations decreased by 12.5 percent (16 to 14) and minority separations increased

by 50 percent (14 to 21). As a result of these measures, the MoDOT separation rate decreased by 0.2 percent, while the female separation rate increased by 0.1 percent and the minority separation rate increased by 1.0 percent.

Steps taken to improve this measurement include: Conducted a Disability Awareness Workshop to better understand and address concerns within the workplace. The Equal Opportunity and Diversity Division created the Diversity Awareness Program. This program is designed to educate and inform our MoDOT family about the different aspects of diversity and its positive influences.



### Transportation-related legislation filed and passed by the General Assembly-17c

**Result Driver:** Pete Rahn, Director of MoDOT

**Measurement Driver:** Lisa LeMaster, Senior Governmental Relations Specialist

#### Purpose of Measure:

This measure tracks significant transportation-related legislation filed and passed by the General Assembly. Significant transportation-related legislation is legislation that is either favorable or unfavorable with regard to providing transportation resources, supporting transportation projects, creating efficiency within the department, or promoting roadway safety. This measure also tracks the department's progress on its own legislative agenda.

#### Measurement and Data Collection:

During session, data is obtained by reviewing both the Senate and House Web sites for legislation in the transportation subject categories. Each bill is then reviewed to determine whether it contains an initiative that is favorable or unfavorable to transportation. The total favorable initiatives filed are compared to the total favorable initiatives that pass and the total unfavorable initiatives filed are compared to the total unfavorable initiatives that pass. The number of favorable and unfavorable transportation-related initiatives filed and number passed are noted on the first chart as an annual measure.

Also, each fall potential legislative proposals are submitted to the Missouri Highways and Transportation Commission for review and approval. The second chart tracks each approved legislative proposal through the legislative process.

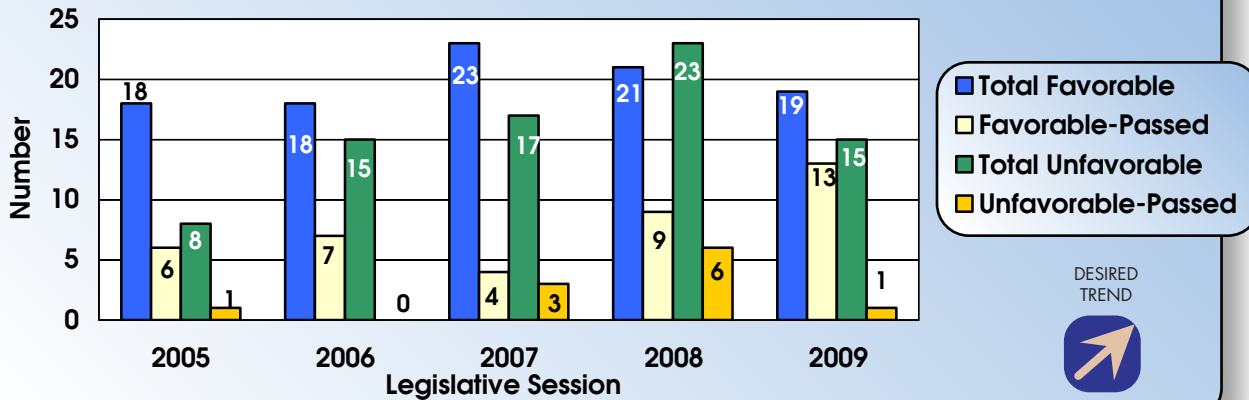
#### Improvement Status:

MoDOT's desired goal is to see all MHTC proposed legislation pass. For the 2009 legislative session, the MHTC proposed three separate legislative initiatives, "Primary Safety Belt," "Incident Management," and a "Missouri Waterways Resolution." Two of the three proposals, "Incident Management" and "Missouri Waterways Resolution" passed. The "Primary Safety Belt" proposal passed out of the House Transportation Committee but was laid over in the House Rules Committee.

MoDOT's desired trend as an advocate for transportation is also to see a larger number of favorable transportation initiatives pass when compared to unfavorable initiatives that pass. During the 2009 session, of the total 1,975 bills filed, 11 percent were transportation-related which equates to 220 transportation bills. Of the 220 transportation bills, there were 34 significant transportation initiatives contained in those bills. Of the 34 significant initiatives, 19 were favorable and 15 were unfavorable. Of the 19 favorable initiatives, 13 passed and six failed. Of the 15 unfavorable initiatives, one passed and 14 failed. The unfavorable initiative that passed was the repeal of the all-rider motorcycle helmet law. However, this unfavorable initiative was vetoed. All other initiatives included in transportation bills were neutral with regard to their impacts on transportation.



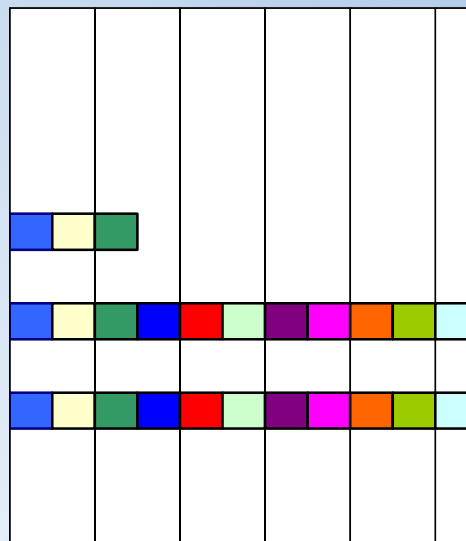
### Number of transportation-related legislation filed and passed by the General Assembly



### Progress on MoDOT Legislative Initiatives

2009 - 95th General Assembly  
First Regular Session

HCS HB 665 Primary Safety Belt  
CCS SS SCS HB 683 Incident Management  
SCR 5 Waterways Resolution



Progress

- 1st Chamber
- Cmte Hearing
- Cmte Vote
- Pass 1st Chamber
- 2nd Chamber
- Cmte Hearing
- Cmte Vote
- Pass 2nd Chamber
- Conference
- TAFP
- Governor Signed

DESIRED TREND:

## Number of federal earmarked projects on the state's transportation system-17d

**Result Driver:** Pete Rahn, Director of MoDOT

**Measurement Driver:** Jay Wunderlich, Governmental Relations Director

### Purpose of the Measure:

Missouri's support for increased transportation funding on the national level can be measured by MoDOT's ability to demonstrate transportation needs to members of Congress. The number of federal earmarked projects on the state's transportation system is representative of the department's success, as an advocate to address the state's transportation needs.

### Measurement and Data Collection:

This is an annual measure. The data represents the total number of federal earmarked projects on the state transportation system that are identified as needs by MoDOT and by Missouri's Congressional Delegation. The number of federal earmarked projects on the state's transportation system represents the department's success in working with Missouri's Congressional delegation. The identified needs for this measure are projects that are included in the Statewide Transportation Improvement Plan (STIP) or projects ready to be added to the STIP as soon as funding becomes available.

### Improvement Status:

The chart shows Missouri was successful in receiving federal earmarks on projects that are classified as needs. As noted in the chart, these earmarks were received in the annual appropriation bills for federal fiscal years 2008, 2009 and 2010. Congress did not include earmarks in the 2007 appropriations bill.

Each year, MoDOT staff provides a listing of transportation needs to all of Missouri's Congressional offices in anticipation of possible funding opportunities. In FFY '08, 34 earmarked projects received dedicated revenues. In FFY '09, 40 projects received an appropriation. In FFY '10, 34 projects received an appropriation.

Even though MoDOT supplies the congressional members with a list of transportation needs, there is always the opportunity for the individual congressman to earmark additional projects on the state system they deem appropriate.

Missouri continues to be successful in receiving transportation earmarks.

Interaction with Congress is very important in receiving dedicated funds for projects that are identified needs. Therefore, MoDOT continues to meet with Missouri's Congressional offices on a regular basis to provide information on transportation issues, urging them to support programs, and projects that address Missouri's transportation needs.

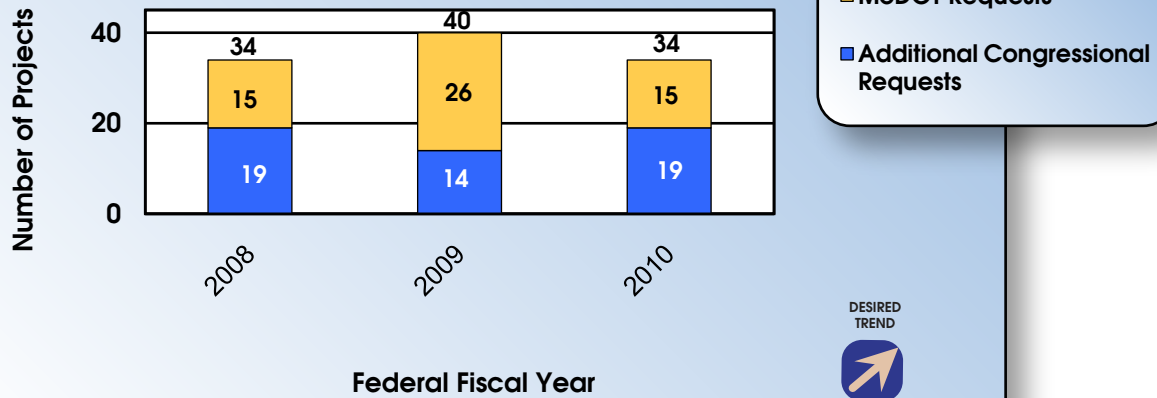
In calendar year 2009, MoDOT met with all of Missouri's Congressional offices and provided them with details on highway, transit and aviation projects for FFY '10 appropriations. In January, MoDOT staff provided Missouri's congressional offices with a FFY '11 appropriations request list.

MoDOT staff continues to keep the Missouri congressional delegation informed of issues related to the economic stimulus package, the next appropriation bill and the department's position on the next multi-year transportation authorization act.

MoDOT continues to strive for Missouri's share of any federal funding opportunity. The department will continue to communicate directly with Missouri's Congressional offices to increase the number of earmarked projects that are identified needs on the state transportation system.



### Number of Federal Earmarks on the State's Transportation System



## Percent of customers who view MoDOT as Missouri's transportation expert-17e

**Result Driver:** Pete Rahn, Director of MoDOT

**Measurement Driver:** Jay Wunderlich, Governmental Relations Director

### Purpose of the Measure:

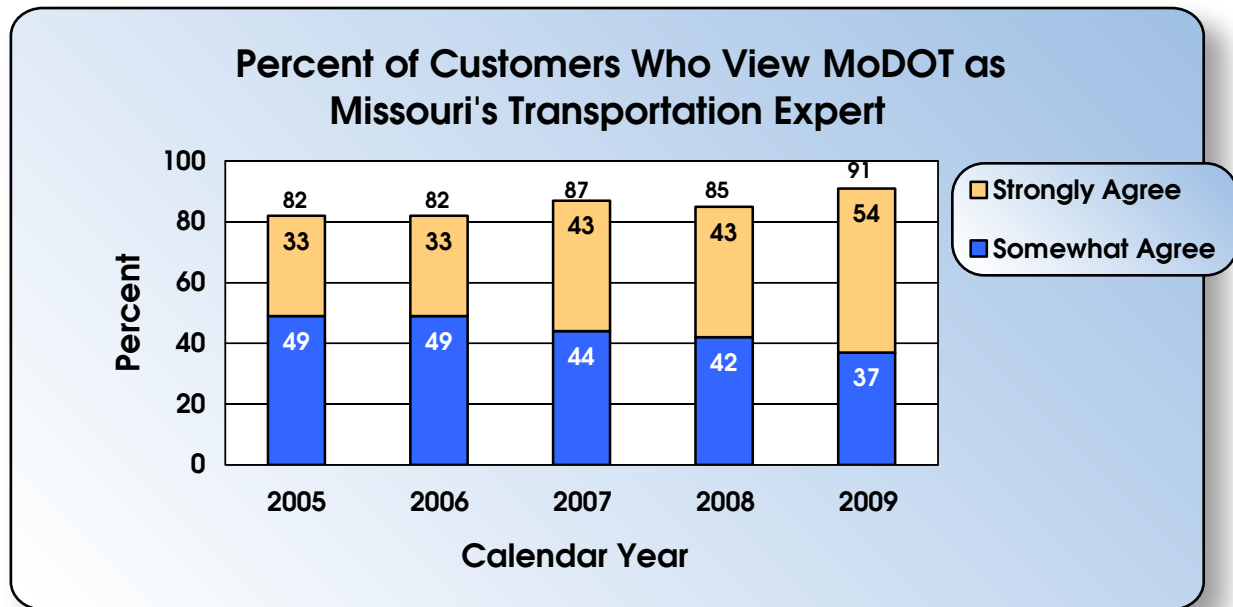
This measure tracks whether our customers feel the department is a leader and expert in transportation issues. The measure shows the department how effectively MoDOT conveys its expertise to the traveling public.

### Measurement and Data Collection:

This is an annual measure updated each July. Data is collected from interviews with over 3,500 randomly selected adult Missourians each May. Each year, MoDOT surveys public opinion to collect information that will tell the department whether or not the public views MoDOT as the primary transportation expert in Missouri.

### Improvement Status:

The current information shows that 91 percent of respondents indicate MoDOT is the transportation expert they rely upon. This represents an increase of six percent since last surveyed in 2008. Through a questioning approach identical to the 2008 survey, the 2009 numbers increased in the strongly agree responses thus reflecting a higher percent of individuals that disagreed with this statement than previously (eight percent in 2009 vs. 15 percent in the last year). MoDOT must continue to work on improving partnerships with citizens, legislators and special interest groups promoting MoDOT as a transportation expert. Ways to accomplish this include increasing awareness of MoDOT's responsibilities to and services for the traveling public.







**Metro Edition**

**IT'S THE DODGER**  
WHY WE PICK LA TO WIN THE 2007 WORLD SERIES

**ST. LOUIS POST-DISPATCH**  
TUESDAY, FEBRUARY 13, 2007 | FOUNDED BY JOSEPH PULITZER IN 1878 | STLTODAY.COM

**Buckling down on buckling up**  
BILLS GAINS MOMENTUM • Police could stop motorists solely for not wearing a seat belt. A hearing is scheduled for today.  
SAVING LIVES • Supporters say it could prevent 40 traffic deaths a year, save money spent on healthcare and bring in extra federal money.

**A grim anniversary in Iraq**  
**Blasts resound during**

**TOP NEWS**  
**NORTH KOREAN ARMS DEAL?**  
U.S. diplomat says the North and five other nations have reached a tentative agreement under which Pyongyang would end its nuclear program.

**LOCAL NEWS**  
**CONGO CRIME?**  
Gratuitous residents of the Congo...  
**TO EXPAND**



# ACCURATE, TIMELY, UNDERSTANDABLE AND PROACTIVE TRANSPORTATION INFORMATION (OUTBOUND)

*Tangible Result Driver – Shane Peck, Community Relations Director*

Accurate, consistent and timely information is critical to accomplishing MoDOT's mission. By providing this information to its customers, MoDOT becomes the first and best source for transportation information in Missouri. Openness and honesty build trust with our customers.



## ACCURATE, TIMELY, UNDERSTANDABLE AND PROACTIVE TRANSPORTATION INFORMATION (OUTBOUND)

### Number of public appearances-18a

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Sally Oxenhandler, Community Relations Manager

#### Purpose of the Measure:

This measure tracks and encourages regular, personal contact with MoDOT customers. A public appearance is defined as any single, public event attended by one or more MoDOT representatives to provide transportation related information. Examples include speeches, presentations, conferences, exhibits, fairs and ribbon cuttings.

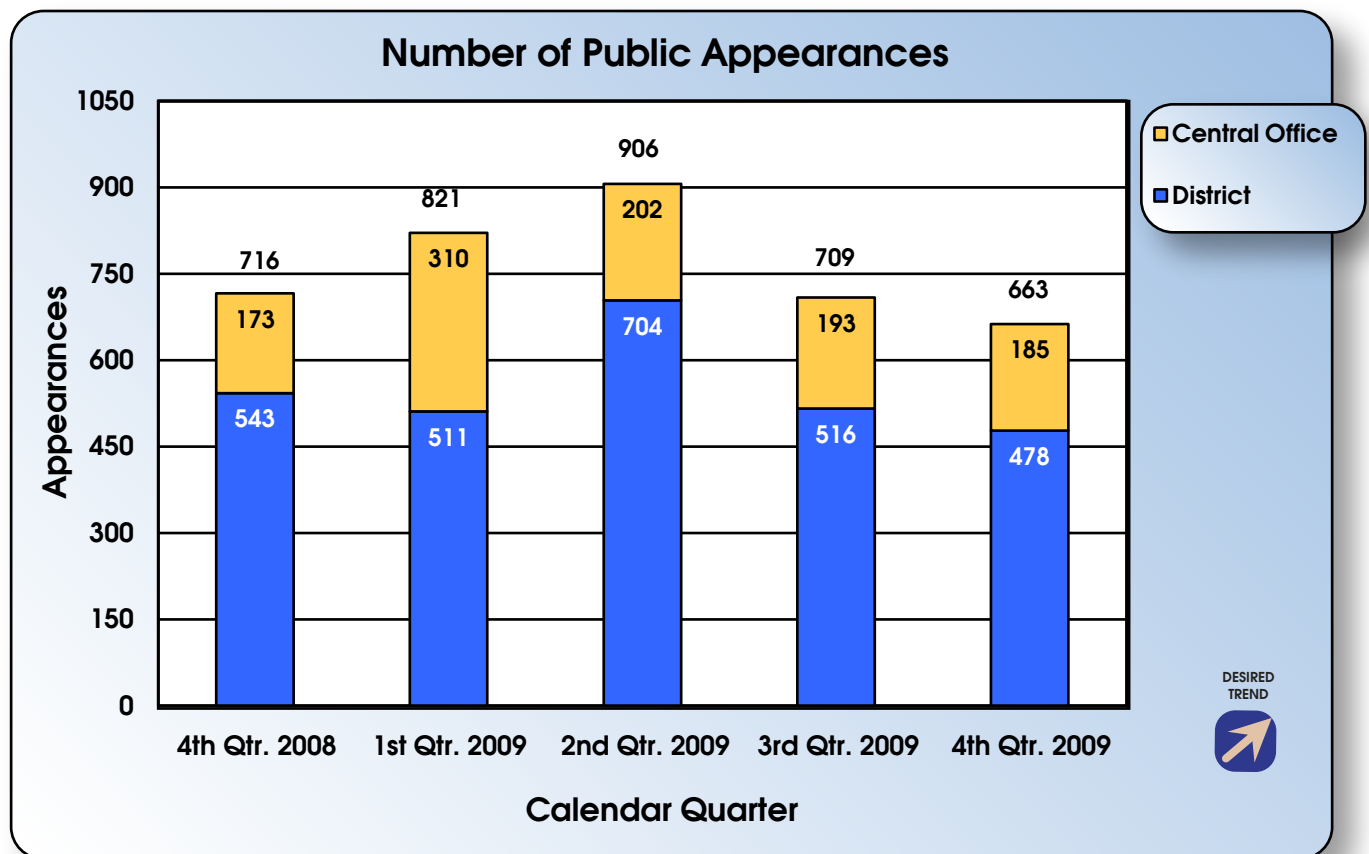
#### Measurement and Data Collection:

This is a quarterly measure. District Community Relations managers collect appearance information from their administrators on a quarterly basis and sends it to Central Office Community Relations; where it is combined with data from divisions and business offices to create a statewide report. The

numbers change from quarter to quarter because certain events and other public appearance opportunities are seasonal, such as school visits and fairs.

#### Improvement Status:

Public appearances dipped again in the fourth quarter of 2009. The slowdown could be attributed to the holidays that occur during this quarter. MoDOT employees documented 663 public appearances and conservatively reached more than 118,000 people. Strategies for increasing public appearances were discussed at the last quarterly meeting of the Community Relations managers.



## ACCURATE, TIMELY, UNDERSTANDABLE AND PROACTIVE TRANSPORTATION INFORMATION (OUTBOUND)

### Percent of customers who feel MoDOT provides timely, accurate and understandable information-18b

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Sally Oxenhandler, Community Relations Manager

#### Purpose of the Measure:

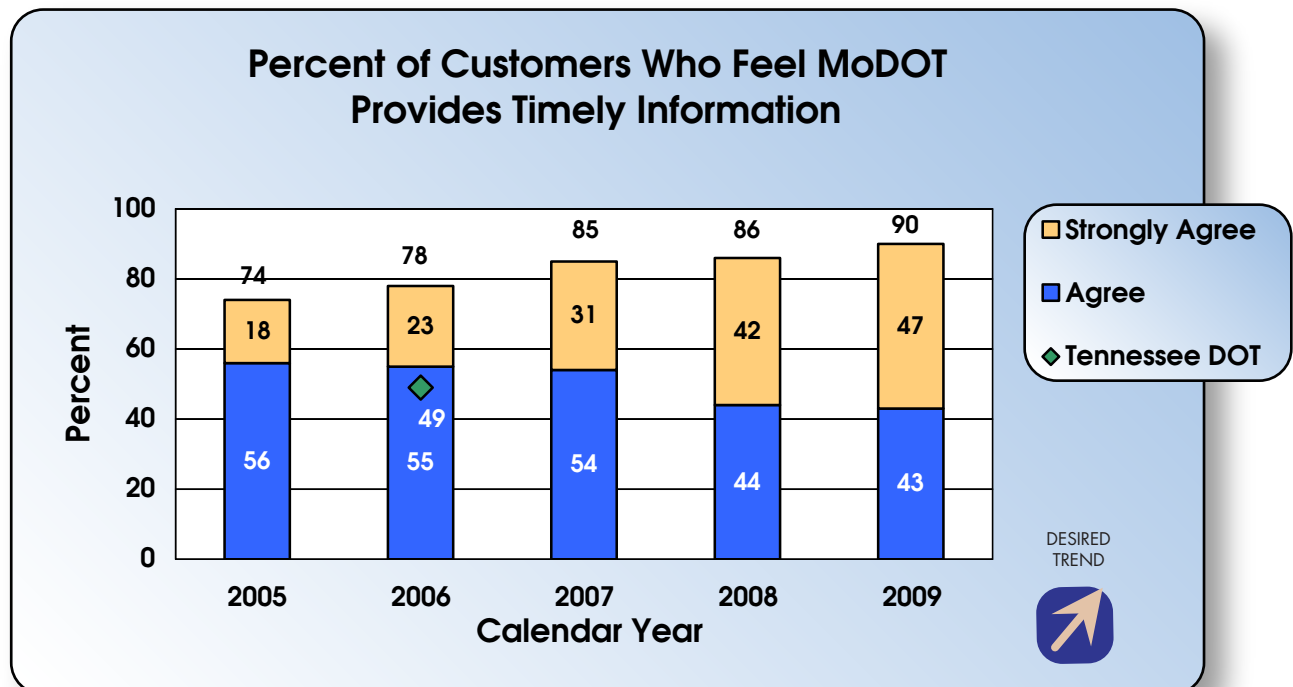
This measure tracks whether customers feel MoDOT provides timely, accurate and understandable information they need and use.

#### Measurement and Data Collection:

This is an annual measure. Data is collected from telephone interviews with more than 3,500 randomly selected adult Missourians each May. As a comparison, the Tennessee Department of Transportation reported in September 2006 (the latest data available) that 49 percent of residents surveyed said they were satisfied or very satisfied with the agency's efforts to keep them informed about transportation-related issues.

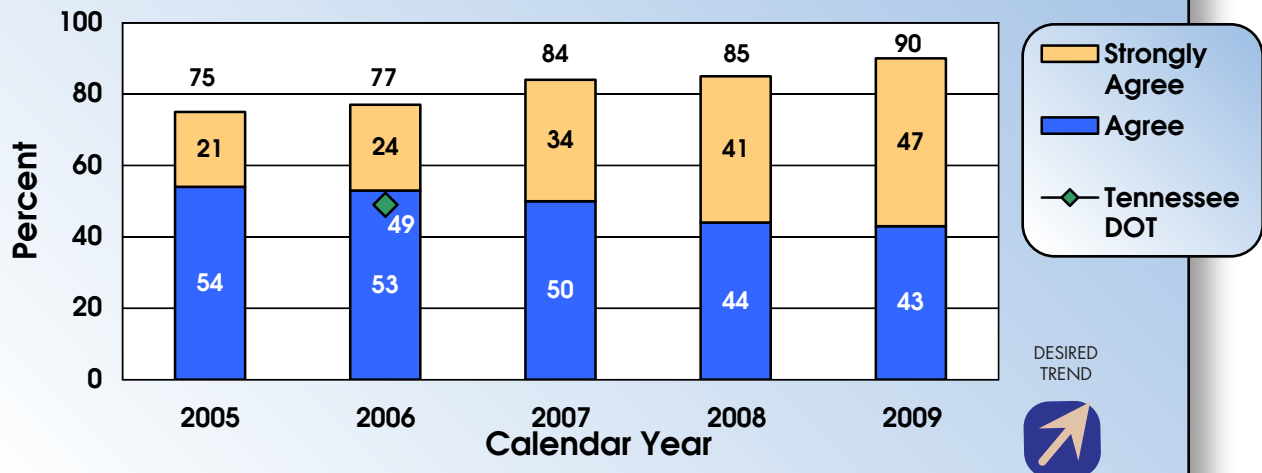
#### Improvement Status:

An outstanding 92 percent of Missourians agree that MoDOT provides understandable information, while 90 percent feel the department provides timely and accurate information. These figures represent a 4-6 percent increase over last year and a 15-18 percent jump since 2005. MoDOT's efforts to be open and transparent can be seen in these results, as can a variety of outreach activities ranging from the Traveler Information Map and electronic message boards to YouTube videos and virtual public meetings. Efforts to communicate major initiatives such as the American Recovery and Reinvestment Act, the Safe & Sound Bridge Improvement Program, the New I-64, kcICON and A Conversation for Moving Missouri Forward likely contributed to the positive responses.

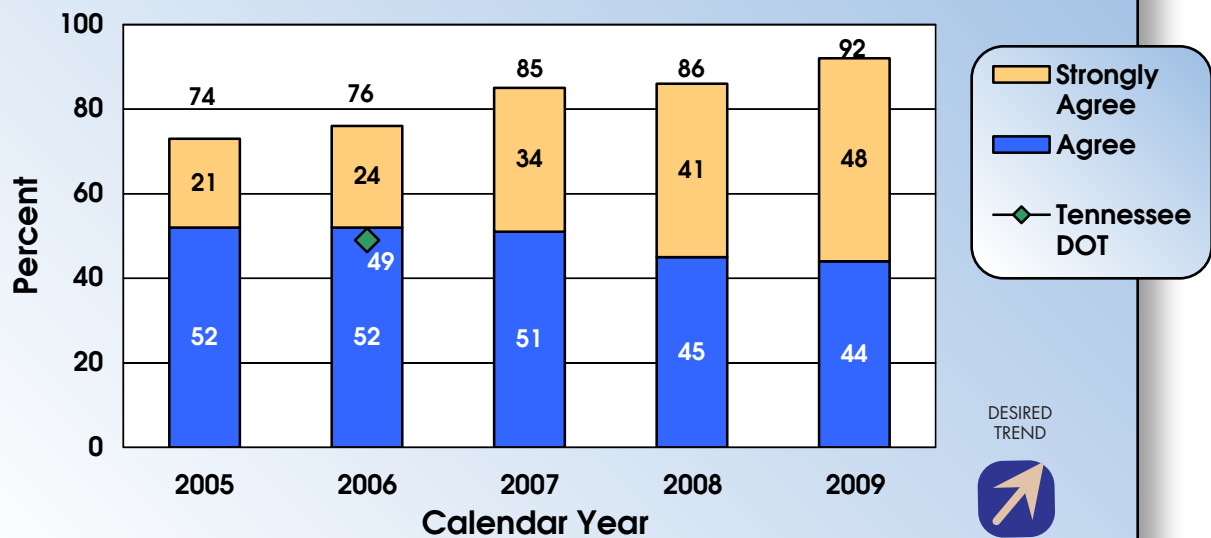


ACCURATE, TIMELY, UNDERSTANDABLE AND PROACTIVE  
TRANSPORTATION INFORMATION (OUTBOUND)

**Percent of Customers Who Feel MoDOT Provides Accurate Information**



**Percent of Customers Who Feel MoDOT Provides Understandable Information**



ACCURATE, TIMELY, UNDERSTANDABLE AND PROACTIVE  
TRANSPORTATION INFORMATION (OUTBOUND)

## Number of contacts initiated by MoDOT to media-18c

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Kristi Jamison, Community Relations Coordinator

**Purpose of the Measure:**

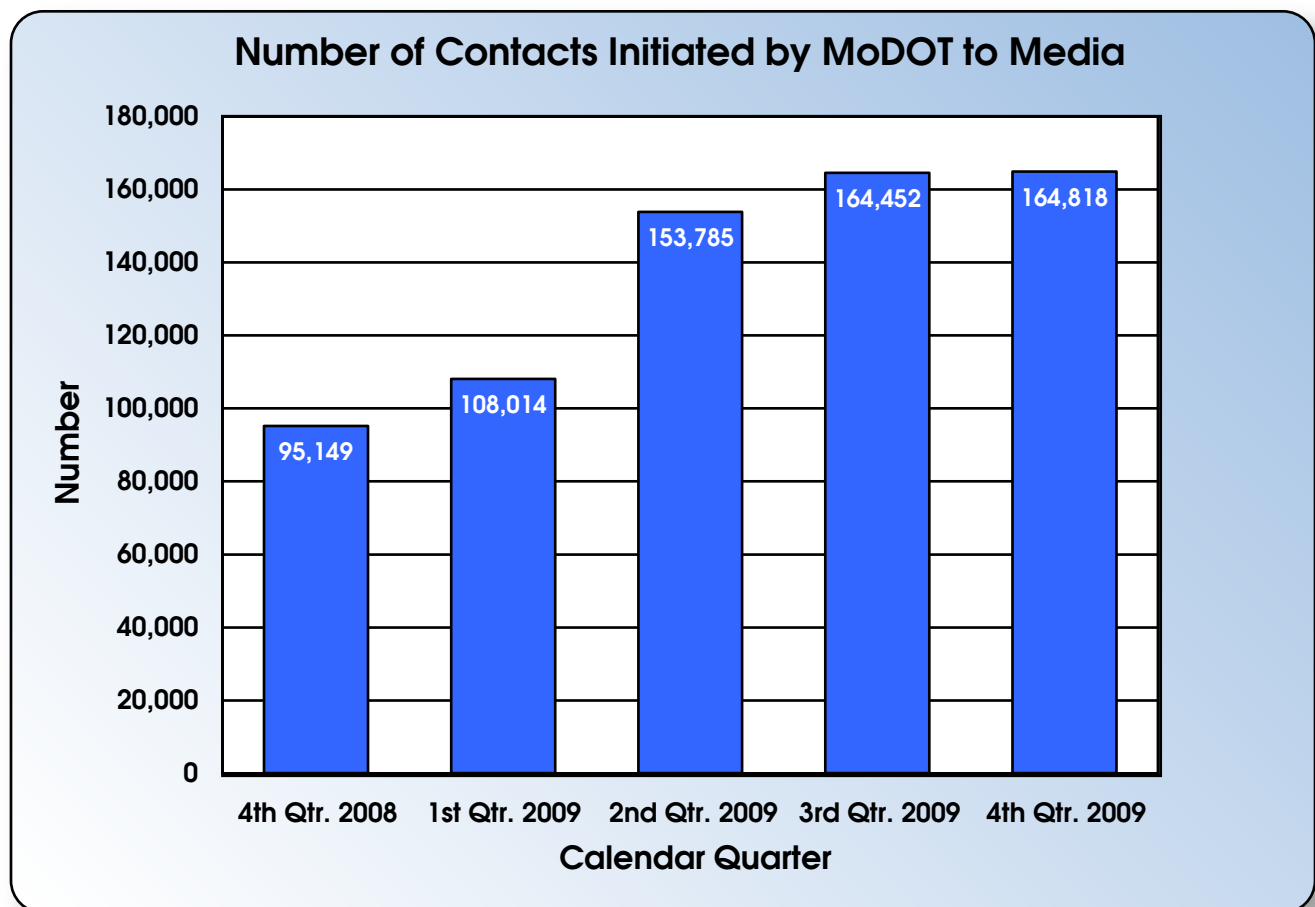
This measure tracks how well MoDOT staff is “reaching out” to reporters to tell them about the good work MoDOT does.

**Measurement and Data Collection:**

All contacts (news releases, e-mail, phone, correspondence and Twitter) initiated by MoDOT staff are included. Central Office Community Relations collects quarterly results, including submissions from districts.

**Improvement Status:**

There were 164,818 media contacts made in the fourth quarter of 2009. This represents an increase of 366 over the third quarter. The increasing use of Twitter continues to help drive the results of this measure upward. A few districts increased their media outreach due to a greater number of public meetings and projects under construction.





## ACCURATE, TIMELY, UNDERSTANDABLE AND PROACTIVE TRANSPORTATION INFORMATION (OUTBOUND)

### Percent of MoDOT information that meets the media's expectations- 18d

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Kristi Jamison, Community Relations Coordinator

#### Purpose of the Measure:

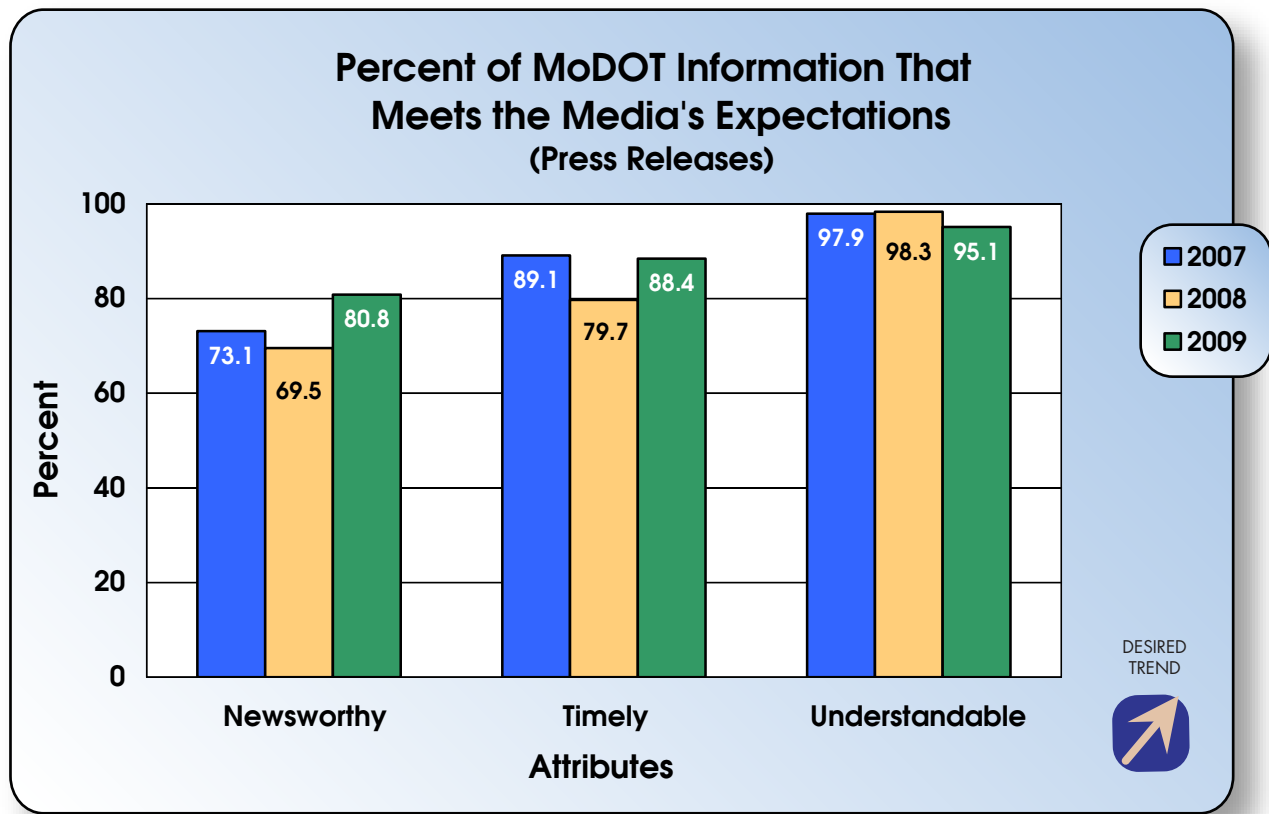
This measure tracks how MoDOT is meeting the media's needs by providing appropriate information.

#### Measurement and Data Collection:

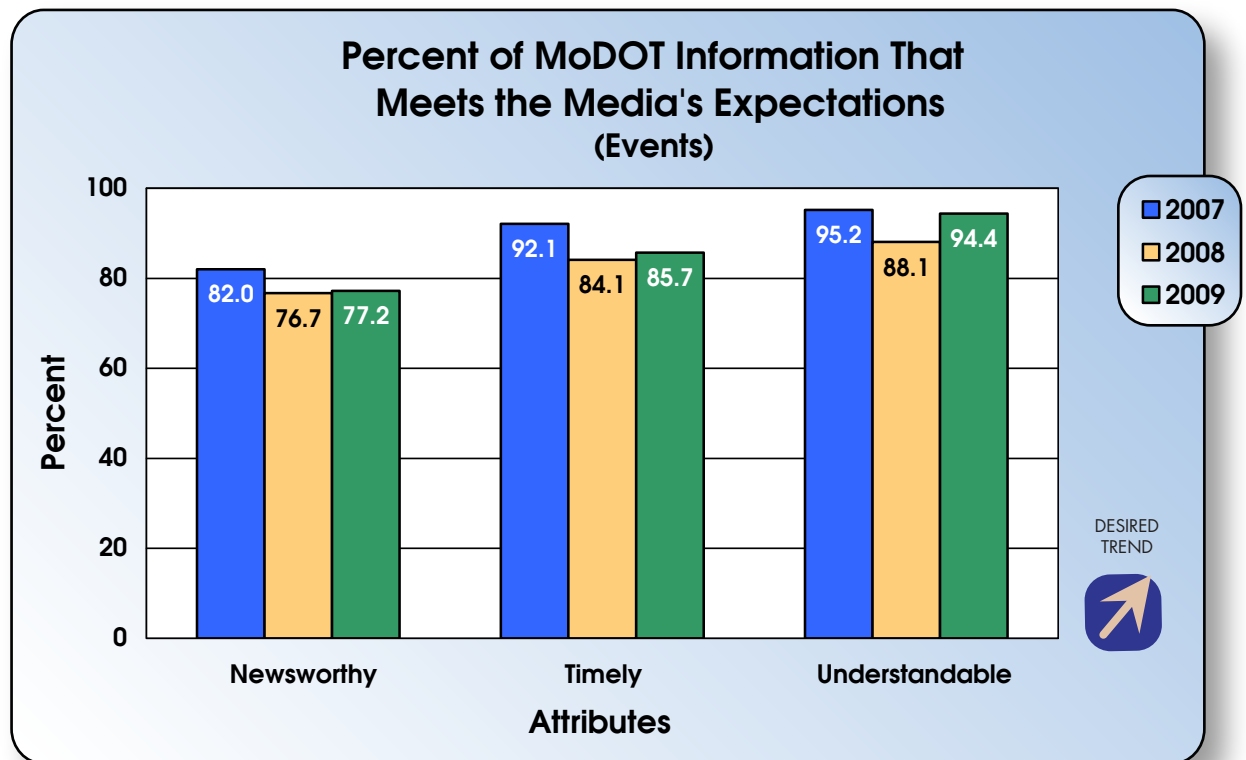
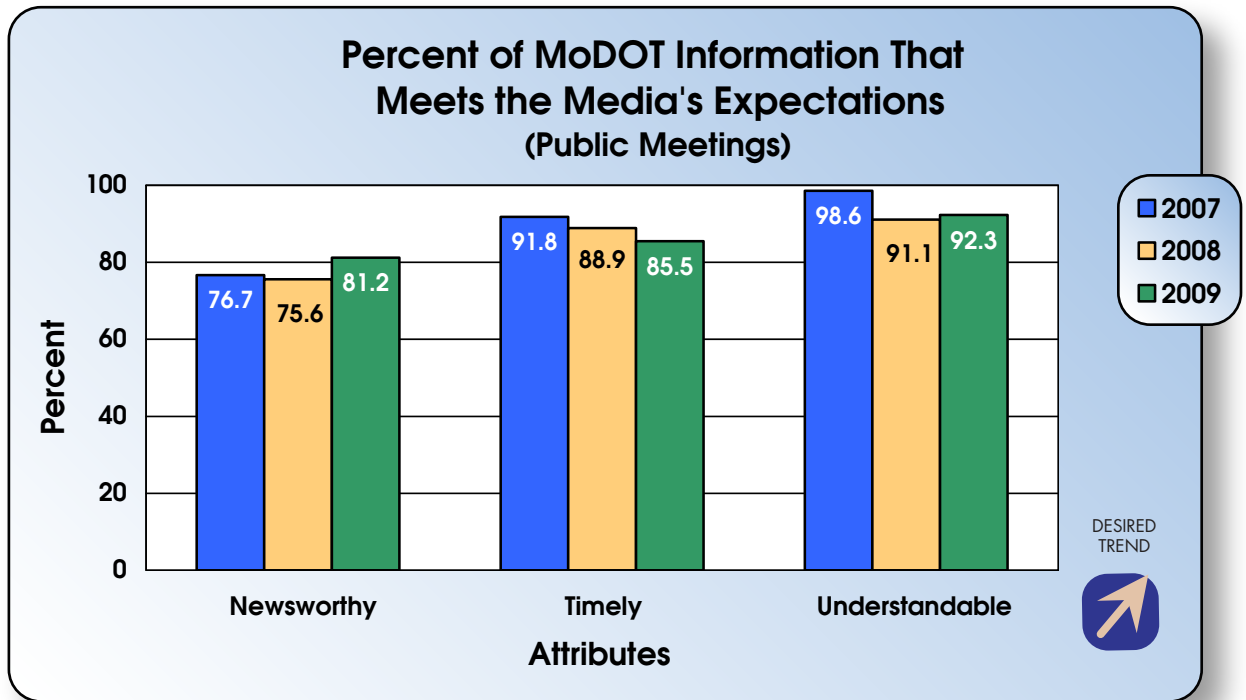
MoDOT sends out an annual survey asking statewide media if MoDOT's outreach efforts meet their expectations. They are asked to rate their level of satisfaction in the areas of press releases, public meetings and events. Each area is further rated in newsworthiness, timeliness, and how understandable it is.

#### Improvement Status:

The annual statewide media survey is conducted each June. There were 105 media outlets that participated in the 2009 survey, a 78 percent increase from last year. To increase responses, the survey was shortened and distributed by district staff to the media outlets in their respective areas. MoDOT is generally meeting the media's expectations. There were positive increases in all but two categories. Press releases were rated slightly less understandable, due in part to distribution formats that have now been addressed. Plus, several weekly papers again stated they aren't getting information in time. In the ratings, the timeliness of public meetings also decreased slightly.



ACCURATE, TIMELY, UNDERSTANDABLE AND PROACTIVE  
TRANSPORTATION INFORMATION (OUTBOUND)



## ACCURATE, TIMELY, UNDERSTANDABLE AND PROACTIVE TRANSPORTATION INFORMATION (OUTBOUND)

### Percent of positive newspaper editorials -18e

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Kristi Jamison, Community Relations Coordinator

#### Purpose of the Measure:

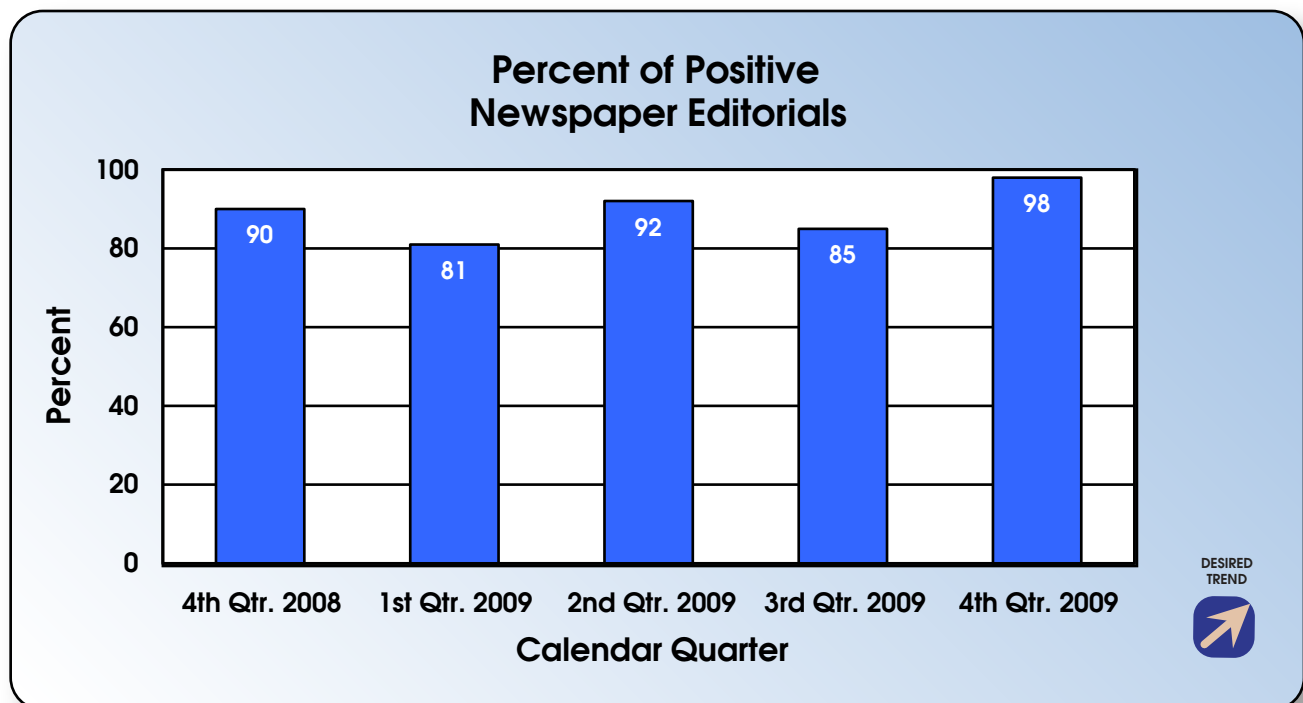
This measure tracks how MoDOT is perceived by the media, and by extension the public.

#### Measurement and Data Collection:

Using a newspaper clips database, MoDOT staff reviews statewide newspaper editorials and determines whether they're positive or negative toward MoDOT and/or the issues it advocates. Only editorials written by newspaper staff are included; guest editorials and letters to the editor are not. Results are charted quarterly.

#### Improvement Status:

There were 42 editorials regarding MoDOT or state transportation issues in the fourth quarter. Of those editorials, 98 percent (41) were positive. The call for DWI reform and stricter bans on texting while driving received the strongest support with a total of 17 editorials. Eight editorials were in praise of MoDOT's completion of the New I-64 project under budget and ahead of schedule. Other topics included support for safety belt laws, red light cameras, I-70 truck lanes, rail safety, port development, and various projects. There was only one negative editorial by the editors of the *Joplin Globe* stating that we shouldn't be governed by law to stop texting and driving.



ACCURATE, TIMELY, UNDERSTANDABLE AND PROACTIVE  
TRANSPORTATION INFORMATION (OUTBOUND)

## Number of overall visitors to MoDOT's Web site -18f

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Matt Hiebert, Community Relations Coordinator

### Purpose of the Measure:

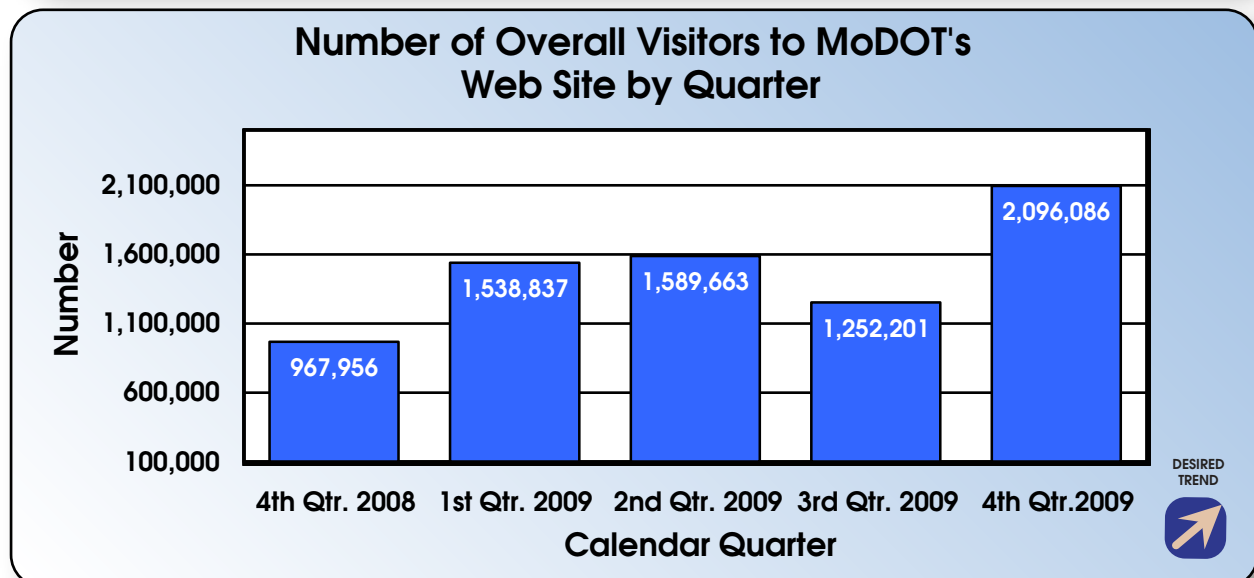
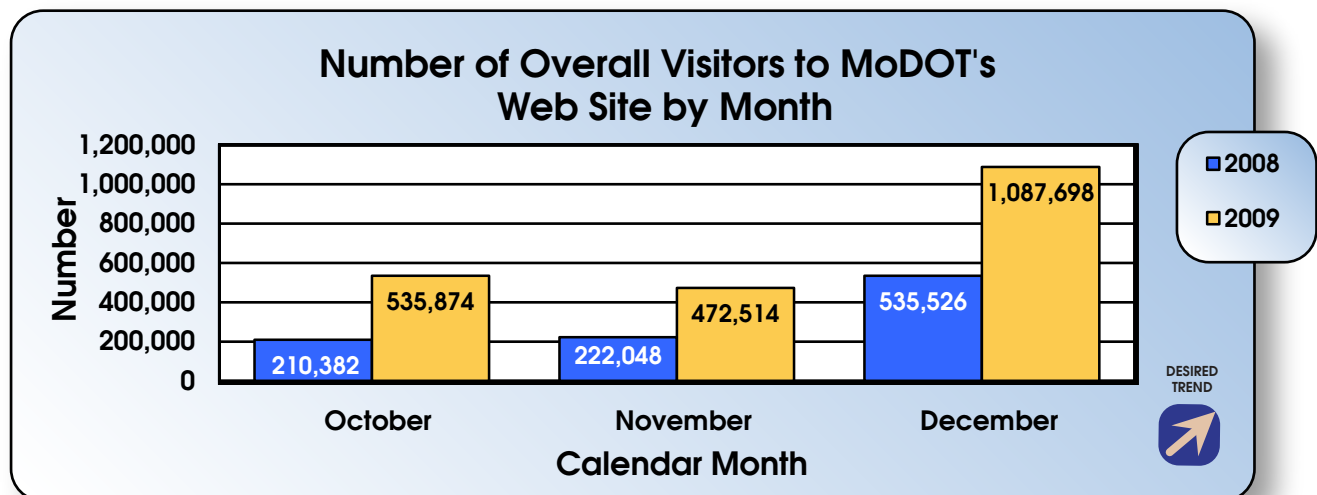
This measure tracks the number of customers who have used MoDOT's Web site. Monitoring overall visitors aligns with national trends for Web analytics and measures both content value and public awareness of MoDOT's Web site.

### Improvement Status:

Bad weathers brought record breaking numbers of visitors to MoDOT's web site. Snow storms in mid and late December pushed overall visitors above the 1 million mark. Awareness of the Traveler Information Map, Kansas City Scout and Gateway Guide largely count for the steady increase.

### Measurement and Data Collection:

Data is gathered using Web Trends software. Web Trends measures site activity and produces reports in graphic and tabular formats.





*(This page is intentionally left blank for duplexing purposes)*



# AMERICAN RECOVERY AND REINVESTMENT ACT

## FAST PROJECTS THAT ARE OF GREAT VALUE

*Tangible Results Driver – Dave Nichols, Director of Program Delivery*

Missouri was the first state in the nation to begin construction on highway projects funded by the Recovery Act. The minute President Obama signed the economic recovery bill, MoDOT went to work to replace one of the state's oldest and most rickety bridges, the Osage River bridge near Tuscumbia. Construction on three other recovery act projects also started immediately. Additional road, bridge, air, rail, transit, pedestrian and bicycle projects will be under way in the coming weeks and months. All along, MoDOT said we'd be ready to go with critical transportation projects, and we delivered. We are committed to putting your tax dollars to use as quickly as possible to create jobs, improve roads and save lives!

## FAST PROJECTS THAT ARE OF GREAT VALUE

### Recovery Act projects and dollars awarded to date -19a

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Jay Bestgen, Assistant State Design Engineer

#### Purpose of the Measure:

This measure tracks the progress MoDOT is making in awarding Recovery Act projects.

#### Measurement and Data Collection:

Projects are awarded by the Missouri Highways Transportation Commission based on formalized MoDOT bid reviews shortly after letting dates. The award dates for each project are also reported and posted on the Federal Highway Administration form 1585, which is the Monthly Recipient Status Report for Recovery Act projects. The data for this measure is collected by the Design Division and will be updated quarterly. All current MoDOT reports for Recovery Act projects can be found on MoDOT's [Ready To Go](#) Web site.

#### Improvement Status:

As of December 31, 2009, MoDOT has awarded 127 Recovery Act projects for \$362,898,346. On November 4, 2009, an additional 53 Recovery Act projects worth \$24.5 million were added due to the award savings generated to date and the continued positive bidding environment. The remaining Recovery Act projects are scheduled to be let each month from December 2009 through February 2010.



*As of December 31, 2009*



## Recovery Act Funds Obligated and Expended to date by Category-19b

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Jay Bestgen, Assistant State Design Engineer

### Purpose of the Measure:

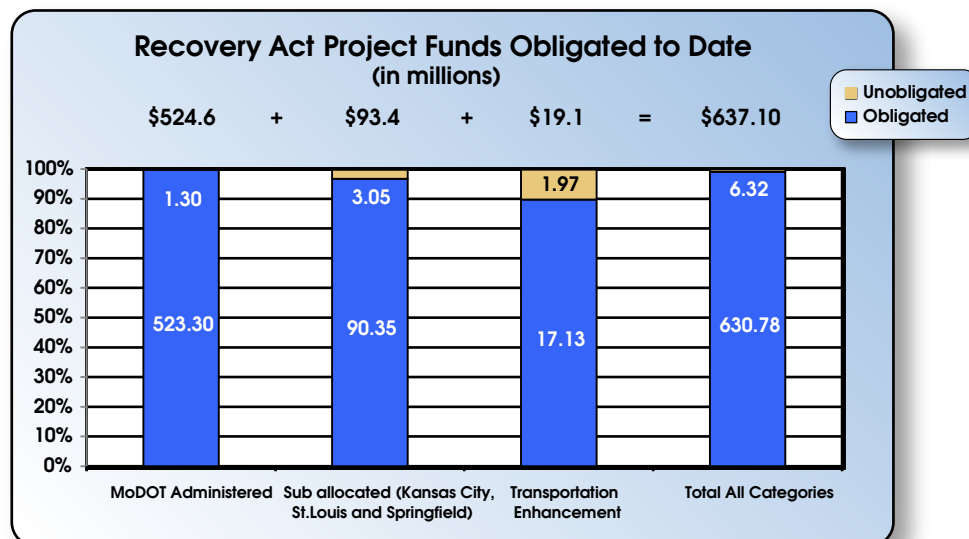
This measure tracks the progress MoDOT is making in obligating Recovery Act project dollars within the time periods required by the legislation. The expenditure of funds by category is also shown.

### Measurement and Data Collection:

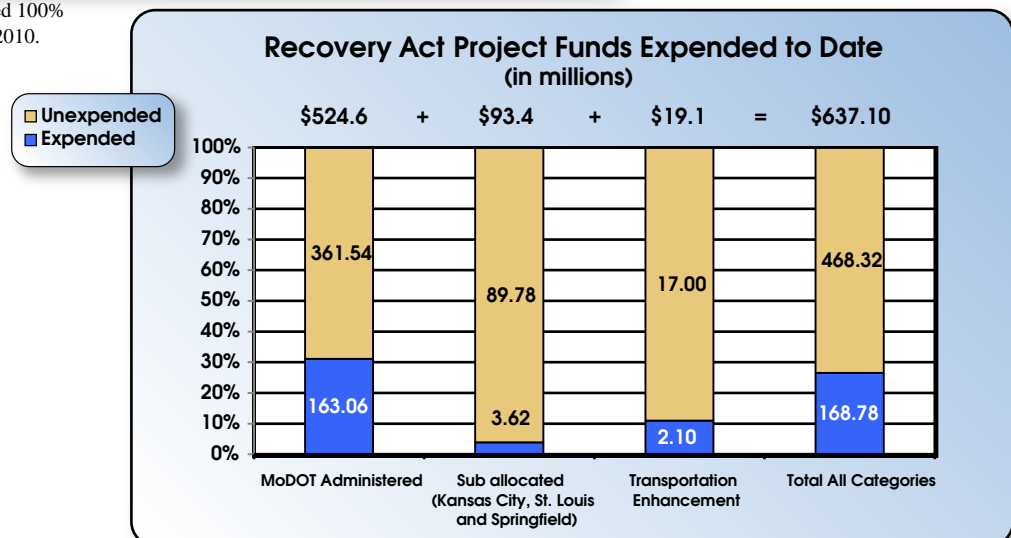
The obligation data for this measure is collected by the Design Division and will be updated quarterly. The expenditure data is collected from SAM II reports provided by the Controller's Division. All current MoDOT reports for Recovery Act projects can be found on MoDOT's [Ready To Go](#) Web site.

### Improvement Status:

MoDOT was required to obligate 50 percent of the Highway Infrastructure Recovery Act MoDOT-administered funds, excluding sub allocated (\$426.9 million) and Transportation Enhancement funds (\$19.1 million) by June 30, 2009. By that date, MoDOT had exceeded the 50 percent requirement by obligating more than \$321 million. The final deadline to obligate the \$637.1 million in Highway Infrastructure formula funds, across various categories, is March 2, 2010. As of December 31, 2009, \$630.78 million in funds had been obligated and \$168.78 million in funds had been expended on projects



\*Note: The deadline to obligated 100% in each category is March 2, 2010.





### Recovery Act project dollars awarded versus budget–19c

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Jay Bestgen, Assistant State Design Engineer

#### Purpose of the Measure:

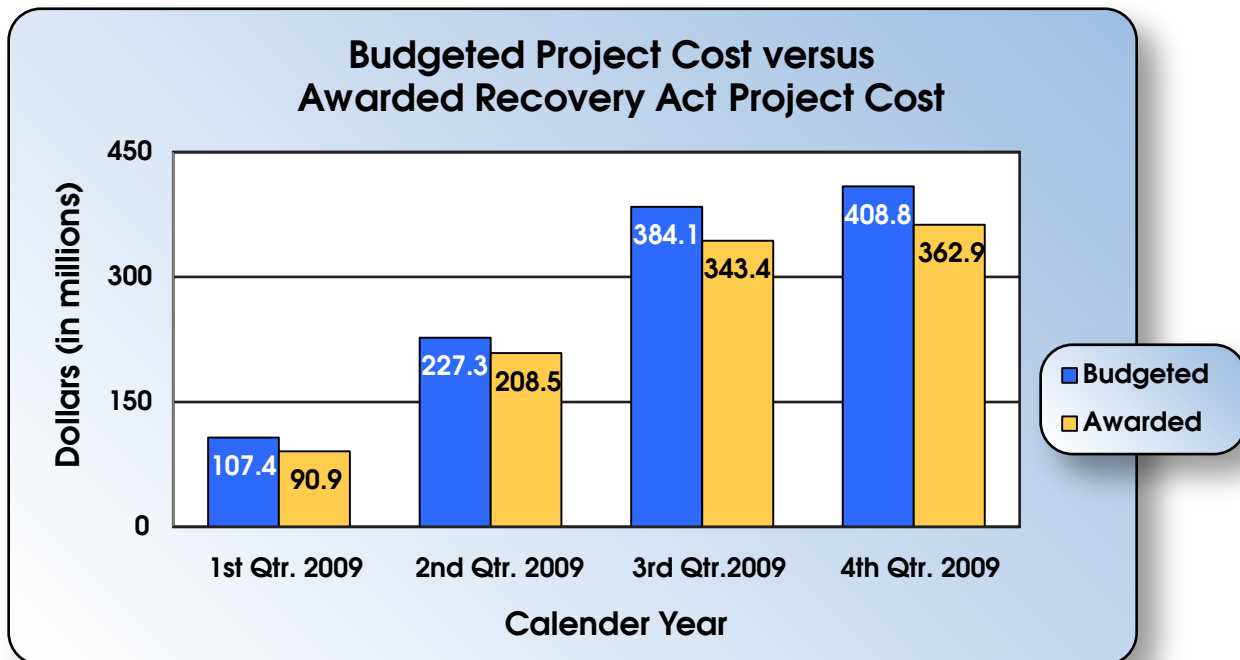
This measure determines how close MoDOT budgets Recovery Act projects as compared to the awarded amount. The measure also tracks the savings MoDOT is achieving by expediting projects using Recovery Act funds.

#### Measurement and Data Collection:

Budgeted project costs include right of way, utilities, construction and other miscellaneous costs. The data for this measure is collected by the Design Division and will be updated quarterly and represents a cumulative total. All current MoDOT reports for Recovery Act projects can be found on MoDOT's [Ready To Go](#) Web site.

#### Improvement Status:

As of December 31, 2009, MoDOT has awarded 127 Recovery Act projects for \$362,898,346. The bids came in 11.2 percent, or \$45,852,654, below MoDOT's program budgets for these projects. The remaining Recovery Act projects are scheduled to be let each month from December 2009 thru February 2010. Bids have been coming in lower primarily due to contractor competition in the market and the strategic arrangement and timing of projects in the letting schedule.



### Recovery Act direct jobs supported–19d

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Travis Koestner, Assistant State Construction & Materials Engineer

**Purpose of the Measure:**

This measure determines how MoDOT Recovery Act projects support direct jobs statewide.

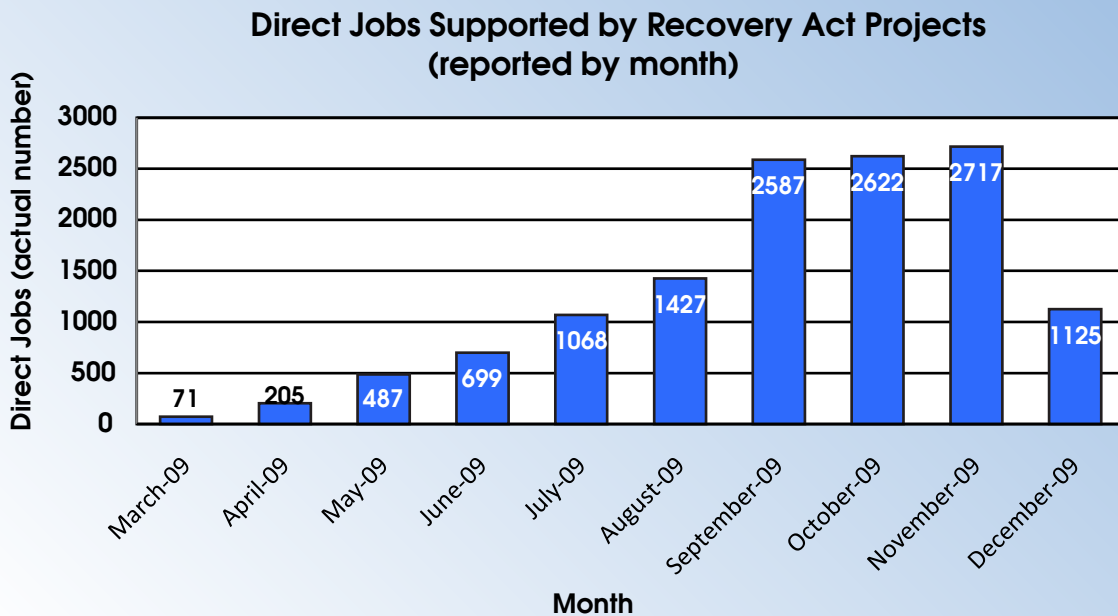
**Measurement and Data Collection:**

This listing is for direct jobs only and does not include the number of indirect and induced jobs supported by manufacturing and delivery of materials for projects or the additional jobs supported by workers contributing to local economies. These numbers come from contractor employment reports received by MoDOT for those projects that are active (i.e. measurable construction activity). Projects included in this data are MoDOT discretionary ARRA projects, sub allocated ARRA projects and Transportation Enhancement projects.

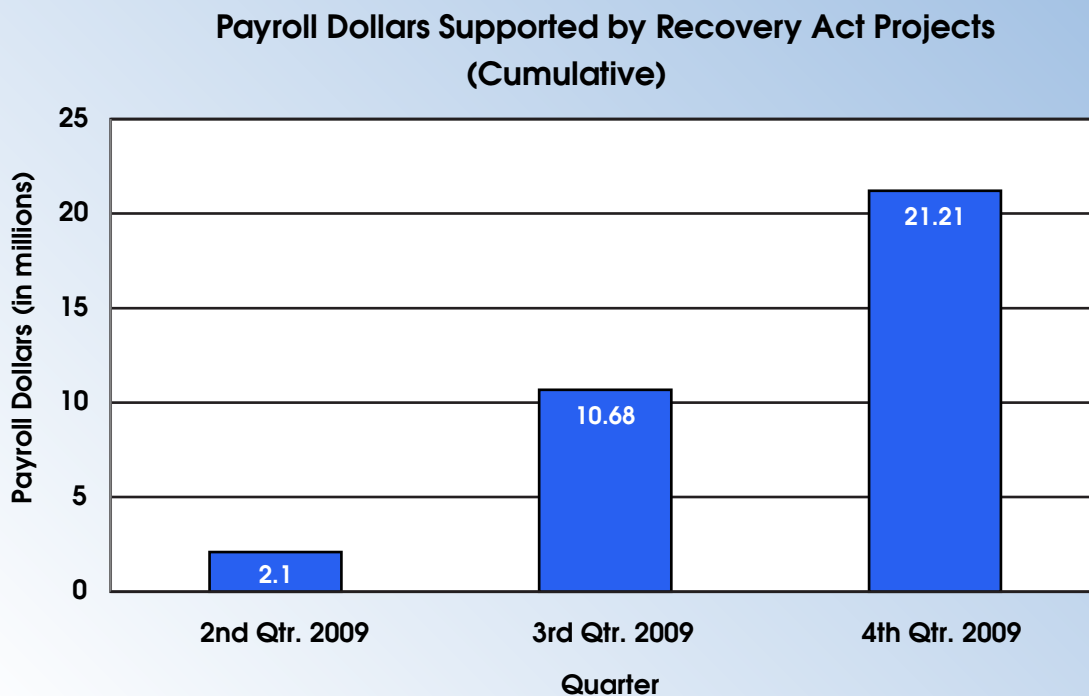
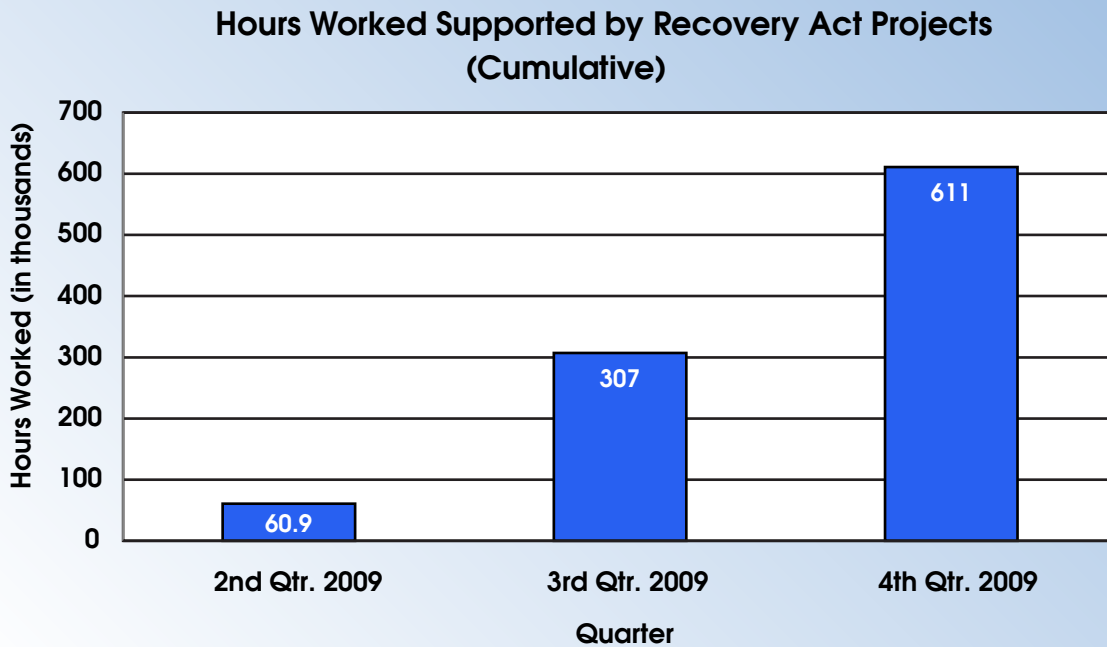
The data for this measure is collected by the Construction & Materials Division and will be updated quarterly. All current MoDOT reports for Recovery Act projects can be found on MoDOT's [Ready To Go](#) Web site.

**Improvement Status:**

The current tally for December 2009 for direct jobs supported by active Recovery Act transportation projects is 1,125. The cumulative total of direct hours worked is 611,000 with payroll over \$21 million.



## FAST PROJECTS THAT ARE OF GREAT VALUE



## Percent of Recovery Act Multimodal project dollars obligated to date -19e

**Result Driver:** Brian Weiler, Director of Multimodal Operations

**Measurement Driver:** Joe Pestka, Aviation Administrator

### Purpose of the Measure:

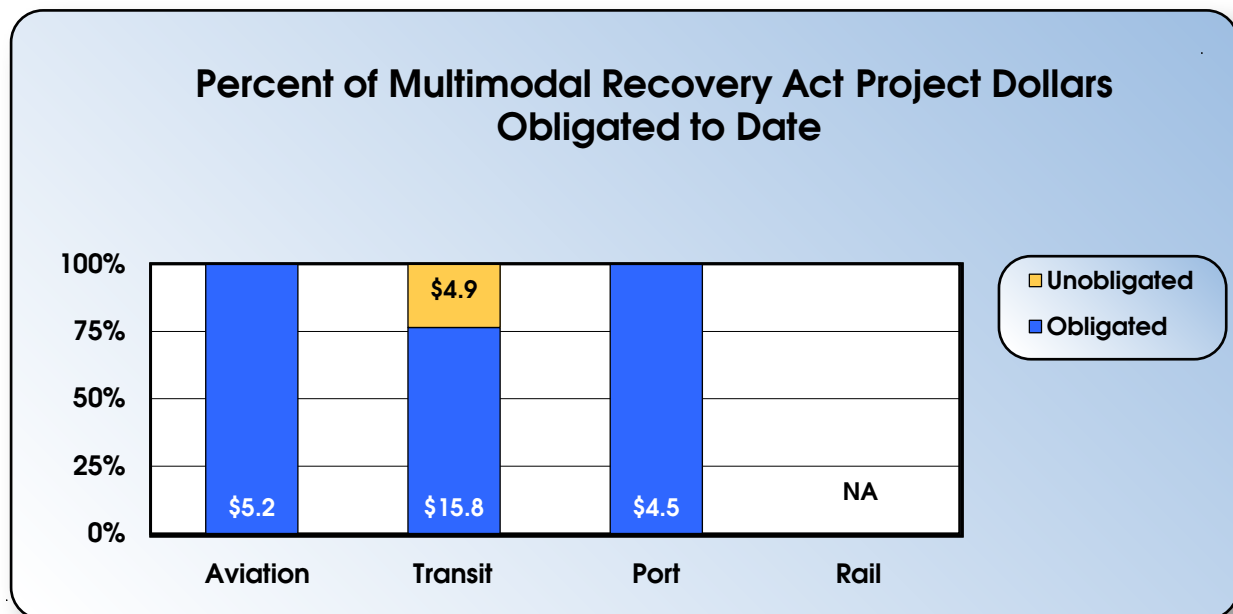
This measure tracks the progress MoDOT is making in obligating Recovery Act project dollars for each mode.

### Measurement and Data Collection:

The data for this measure is collected by Multimodal Operations and will be updated quarterly. All current MoDOT reports for Recovery Act projects can be found on MoDOT's [Ready To Go](#) Web site.

### Improvement Status

Each multimodal unit has different processes and guidelines regarding available Recovery Act funds and grants. As of December 31, 2009, the Aviation and Port units have obligated all available funds and Transit has obligated approximately \$15.8 million of their available funds. Grant applications for Rail Unit Recovery Act projects have been filed. In total, \$25.5 million dollars have been obligated for multimodal projects. This is approximately 84% (excluding rail) of the total amount of Recovery Act funds for multimodal projects that MoDOT is expected to receive.



*\*Obligated and unobligated dollars as of December 31, 2009 are shown (in millions).*